

World Union



WORLD UNION

*A world union based on the fact of human unity
realising the truth of the Spirit*

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Edited by M. P. Pandit

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EDITORIAL

Law, Conscience, and Life

It is an old problem about which there have always been two opinions: Is it permissible to end the life of one in the throes of incurable suffering or in a hopeless coma? The question has become a prominent issue recently in the United States due to the instances of two young women in such a condition—under hospital care but with no possibility of medical cure. Their parents and sympathisers have argued for the right to stop treatment, which would quite certainly bring what they consider merciful relief and a natural end. In the case which went to court, it has been ruled that under no circumstances can a patient's life be wilfully terminated. The judgment has been regarded by some as insensitive.

The solution really depends upon our approach to life. If we believe that life begins with the birth of the body and ends with its death—accepting thus the materialist philosophy—then clearly there is no point in keeping a body alive if it is subject to an incurable and painful disease, or is in what is regarded as a permanent state of unconsciousness. But if we believe that man has a soul and that spiritual evolution is the meaning of life, the question assumes a different character. The soul takes embodiment with a purpose: it grows from its experience in the body. Thus the answer to the question whether the body is to be kept alive or not must come from the soul. Neither parents nor doctors nor judges are likely to know what the inner being or soul feels, or what is necessary for its growth.

The will to live is strong in all living beings, and this is truly a reflection of the choice and nature of the soul. Left to itself, life refuses to submit to death as a way to avoid suffering. It endures and persistently forges fresh strength to conquer the suffering. When the soul truly no longer has any need of the body, it simply drops it and passes on. Men have no right to interfere with the working of the soul which itself is a spark of God.

The Clergy and the CIA

The proclaimed refusal of the chief of the American Central Intelligence Agency to give an assurance that clergymen will not be used for the agency's information gathering raises certain important questions. Are spying and patriotism thought to be synonymous? Can one call upon another to betray a personal relation and confidence in the supposed interests of one's country? To whom does a clergyman owe his primary allegiance, to his country or to God?

A minister is given certain privileges in society because he is expected to have no interests beyond serving God and helping others to grow towards God. Is he to abuse his position by gaining confidences only so to betray them at the behest of his clandestine paymasters? Espionage is an expected and even accepted part of statecraft, yet there are at least tacitly some internationally recognised guidelines. The CIA's cynical policy of employing clergymen, if it continues to be sanctioned by the United States government, is sure to undermine the relation between ministers and those they are intended to serve; it makes a mockery of the institution of confession and its variations. Such a policy amounts to a blatant fraud against the society of which the clergyman is a member. Apart from being irreligious, it is positively dishonest.

M.P.P.

GOALS FOR GLOBAL SOCIETY

Ervin Laszlo

The unprecedented situation in which mankind finds itself calls for a fundamental change in the way human societies conduct their business and perceive their interests. At no previous time in history was the pace of development so rapid, nor the need to avoid crises so great. Attempting to manage the future of man on this planet by using traditional concepts to guide traditional policies is like trying to steer a spaceship with the rudder of a sailboat. It may be tried, but it is bound to fail.

The new situation of mankind derives from its planetary dimensions. At earlier epochs societies could exist relatively independent of one another. Now our technological appetites and our sheer numbers make independent coexistence impossible. The strands of interdependence are criss-crossing the globe and fewer and fewer societies can escape it. Yet the societies of this epoch are more heterogeneous than those at any other period. We find the full range represented, from the still stone-age tribal societies in remote corners of Asia, Africa and Australia, through the early agricultural type societies in much of the Third World and the resource rich but still developing societies of the Mid-East and Latin America, to the various forms of highly industrialized Western, Oriental and Socialist nations of the Northern Hemisphere. Some societies are on the threshold of the post-industrial society; others are just crossing the Neolithic boundary of organized agriculture. Yet all societies, in all their diversity, are now occupying an increasingly crowded, increasingly interdependent planetary environment. In this situation there is little room for error, for the price of even a small mistake can be the suffering or death of hundreds if not thousands of millions of human beings.

In some respects the world has always been one: the vast currents of air and ocean, the proliferation of life and its colonization of all habitable niches on land and sea made for a seamless web that we know as the biosphere. But from the viewpoint of life within the biosphere, local conditions were of paramount importance and distant events could be safely

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ignored. Except for the flow of nutrients, the conditions of one ecosystem were but weakly affected by natural conditions beyond its boundary; events in one ecosystem had little impact on others. Life was smoothly functioning in a mosaic of ecological niches and buffered systems, even if they altogether formed a continuum within the biosphere. Until about the year 1500, such mutual independence was true also of human societies. There was virtually no contact between the great cultures and civilizations of Central and South America, central Africa and Australia. Interactions did exist among the peoples of Europe, Asia and northern Africa, although those between China, India, the Middle East, and Europe were slow and left large gaps.

The technological revolution beginning in the eighteenth century increased the speed of travel a thousandfold, removed almost all boundaries from the transmission of information and indirectly contributed to the explosive growth of the world population. Interactions among the world's peoples increased and evolved into various forms: rivalry and animosity, as well as cooperation and mutual dependence. Independence and sovereignty are still supreme values in many spheres of society today, associated with the modern form of social and political organization: nation-states. Indeed, until the cataclysms of the two world wars of this century, nation-states could successfully regard themselves as sovereign and independent. Each could, if it so desired, reject the principles and practices of at least some of the others without immediate and noticeable harm to itself. The world was still heterogeneous, but its mutual ties have not intensified to the point where concepts of autonomy and separateness became perceivably false.

The reconstruction after the Second World War forged economic as well as military alliances which bound the nations of Western Europe always closer to one another and to the United States and those of Eastern Europe to the Soviet Union. The world developed a bipolar power structure with most of the wealthy and powerful nations aligned in one or the other camp. Developing countries could strive for self-reliant "bootstrap" progress to major status, as did Mao's China, or had the choice of aligning themselves with one of the power blocs. Those that wished to remain unaligned were forced into closer mutual ties with each other.

After World War II, nations became grouped into different and in some respects opposed political and economic blocs. War could be avoided only through the concept of "peaceful coexistence". It denoted a condition of forced tolerance; a recognition of diversity but not the willingness to condone it or make use of it.

In the sixties and the seventies the structure of peace and world order forged under the concept of coexistence began to break down. The ties among nations outstripped the perceptions of their peoples. Whereas most of us have hardly begun to recognize the unreality of national independence, global conditions made even coexistence dangerously unfunctional. As some twenty-seven percent of the world population in the developed countries consumes over eighty percent of its resources; as half of the population lives on the edge of

starvation; as one fourth is still illiterate for want of the means of education; as the amount of explosives stockpiled in the arsenals of the great powers is enough to wipe all forms of life from the face of the earth; as all nations become aware of the disparities in standards of life and the fulfilment of human needs; as all nations with but few exceptions are represented in world political forums and partake of the global flow of practically instantaneous information—as the disparities grow parallel with the ties of interdependence and people's awareness of them—the posture of mere tolerance denoted in the concept of coexistence is exposed to unbearable strain. World-scale crises make their appearance and nation-states find themselves impotent to adequately resolve them. Military and economic powers wielded by powerful blocs are likewise unable to contain the strains and stresses arising from the increasing interdependence of economically, ideologically and politically divergent and often opposed actors.

The reality of the 1970s is hallmarked by the constraints and threats of a highly technologized, interdependent yet still provincially organized and managed era of transition. All nations and all cultures participate in this transition, the outcome of which is still undecided. None can determine a positive outcome by itself. Our era of globalized technology operating in a finite and highly heterogeneous environment, guided by partially outmoded values and beliefs, can only be managed by an unprecedented revision of human, social and economic aspirations and a new level of cooperation in orchestrating and implementing the new, more appropriate goals and values.

As all previous epochs in history, the coming era of global society will evolve its own conception of man, nature and society. It will be guided by what people consider desirable goals and aspirations, for themselves, their fellows in their vicinity and, directly or indirectly, for all others as well. The interplay of ideals, objectives and goals will have unprecedented power to steer the evolving global society along pathways that range from those of crises and catastrophe, to wellbeing and biological, social and cultural fulfilment.

The critical factor is time. The global level of sociocultural organization will eventually evolve its own set of goals and aspirations, but it could do so at great cost in human lives and suffering. If the presently still operative non-functional goals and aspirations fail to give way to newer, more humanistic and adapted modes of thought and ambition before critical thresholds in the natural and social worlds are reached, the race with time will have been lost. The new goals and aspirations must evolve prior to the greatest urgency and the gravest emergency. They must not simply react to pressures but come to anticipate them and prevent their unfolding. The new social and humanistic ideals of the era of global society must be proactive rather than reactive. For this need, channels should be opened for discussion and deliberation with the greatest urgency.

Our report's contribution to this process is in the form of a proposal of a new, socially conscious and humanistically oriented set of conceptions, values and goals: *social humanism*. We believe that social humanism is better suited to the new conditions of planetary

existence for humanity than the previously evolved and propagated shortsighted national goals and polarizing ideologies. The espousal of social humanism does not bring with it the uniformization of the world, its attunement to a single "global ideology". On the contrary, diversity and social and cultural integrity is of the very essence of social humanism. It goes beyond existing alternatives in recognizing the interdependence of all societies and peoples and the present need for *coordinated diversity*. Neither the imperialistic spread of a single set of principles that enforces compliance by overt law or covert enculturation, nor the laissez-faire permissiveness of mushrooming and chaotic diversity, constitute safe and responsibly approached paths to global futures. *Both* global coordination and local and regional diversity are of the essence. These are not contradictories, but complementaries. As an organism functions well when its manifold parts perform each their own function with optimum synergy with the rest, and as an ecosystem achieves maturity and unfolds its complexity when many diverse species and populations live together symbiotically, so human society can thrive on diversity, orchestrated within its new, global context. A recognition of this situation and its demands means an espousal of a new set of goals and aspirations that hold for all people and all societies without constraining them to uniformity or fragmenting them to conflict and chaos. It is this set of new, supranational and supraregional, truly global, goals and aspirations that we denote by the term "social humanism".

The concept *interexistence* captures the meaning of the relations among diverse and self-determined, yet coordinated and interacting peoples and societies. In global society coexistence is not enough: it merely condones the status quo and treats the world as a mosaic of still independent and mutually irresponsible states and societies. Continued adherence to it gives a new lease on life for outmoded beliefs and values and permits the unfolding of the existing gaps and inequalities, and social and economic problems. But coexistence is an attitude rooted not in human nature but merely in the postwar period when, for a time, it had a positive function. Its fruitfulness is over. Yet this realization, rather than fuelling incipient wishes to detach oneself and one's society from the world, must lead to a new attitude of cooperative existence aiming at the self-determined integration of diverse nations and peoples in a humanistic world order. Hence in social humanism we move from the posture of coexistence to that of interexistence.

This report is not meant to give directives or make pronouncements, but to stimulate discussion and subsequent action through positive and relevant ideas. It analyzes the processes and conditions of our era and outlines the role of aspirations in guiding our species toward more desirable alternative futures. It reviews the existing, partially malfunctioning policies and institutions and the goals and aspirations that lie behind them. It also reviews the existing and in part still rapidly emerging new values and goals which hold the seed that could be nurtured into a socially responsible and humanistic pattern of global goals and aspirations. Finally, it presents our own thinking on the nature of the new societal paradigm which, in our view, is specifically fitted to the conditions—dangers as well as opportunities—of the coming age of global society.

RETROSPECT

Three Poems

Vision at Sunset

*Glory of red in the clouds owns my eye;
The Plot is revealed in the script of the sky;
The twilight is made twice brilliant and still;
The Secret is out and all echoes the thrill.
My mind is set free from the clamorous claim
Of these things that cry out the manifold name
Of the unnoticed, unnamable One
And is hushed in adoring and grateful content.
No longer can wonder not trouble my rest.
My life with the living around me is blent.
Nothing to seek after; all is possessed.
Nothing to do but what is to be done.*

Vista

*Half-moon rising above the hill
Makes a triad with the sun and earth;
Textured hillside of countless greens
And a wide expanse of flawless blue.
In this mysterious difficult world
Not always will vistas be this beautiful;
Change is attended by conflict and pain,
The portion of those who attempt to become
Something more than they are, something not incomplete,
Something subject no more to the laws of the past.*

Bright Backward

*That was the time of Wordsworth and Rousseau
And Shelley, when I looked out on the world
And tried to find the sacred midnight glow
Behind its figures. But now I am hurled
Like a cork caught up in some tremendous flow
Down rapid hillsides and transvexly whirled*

*In the vortex of your Energy. No time
To see, as in a mystic lake of zen
The depths of the immovable sublime.
Ah, I was a light-hearted wanderer then
And carefree maker of the mystic rhyme - -
But yet I would not have those times again.*

*That was the time when a chance falling flower
Could wake in me thoughts too profound for speech;
When in the sun of an ecstatic hour
On Catskill ridge or Massapequa beach
Or star-enraptured on some college tower
I learned the wisdom that no books can teach.*

*Yes, that was the time when amplified guitars
Drowned out the bass-beat with their frantic scream
And through the windows of fast-moving cars
I saw the patterns of the ancient dream;
And even the outright ugliness that mars
The gentle passage of that distant stream*

*Cannot take back the truth that I saw then—
Before you bound me to your labour's wheel—
But yet I would not have those times again;
I seek a more material ideal.*

Peter Heehs

A collection of poems by Peter Heehs was published last year under the title Night and Dawn. A twenty-seven year old American, Mr. Heehs does research and editorial work for the Sri Aurobindo Ashram Archives and Research Library. For the last four years he has been working in this department on the now completed index and glossary of Sanskrit terms to the birth centenary edition of the collected works of Sri Aurobindo.

CHANGE AND CONTINUITY — VIII

Relevance and Limitations of Western Political Thought: Notes for an Alternative Indian Political Philosophy

[This is the concluding instalment of this series]

K. Dutta

Mohandas Karamchand Gandhi, saintly and beloved of the people, possessed of a mind quick and subtle but neither deep nor wholly clear, humble and identifying himself with the people yet obstinate and intolerant of opposition, passionately truthful and yet capable of self-deception, is one of the most baffling and contradictory of great historical personalities. Entering the political arena through the accident of his "experiments with truth", he dominated it for almost three decades and excluded the free operation of any style of politics other than his own. In comparison to other great movements, his produced no truly outstanding personality save Subhas Bose, whom he ruthlessly banished; every other "leader" gloried only in his borrowed light, ultimately to betray him in his last years. (In recent years the reputation of Sardar Patel has gone up, largely by default. No doubt he was an outstanding administrator and a very effective organiser but he lacked the qualities that endear a man to the mass and his intellectual limitations were far too grave to permit his being ever acknowledged as a leader of absolutely the front rank.) All great leaders in history have had fixed aims and flexible methods; this amazing man had a fixed method but

no very definite aim, unless it be the "moral conversion" of the British or the revival of the self-sufficient village community.

And yet he commanded an unparalleled prestige in his own day, if no longer now. In part, it seems, this prestige and popularity—for the two did go together in those days—was due to his curious combination of the styles and methods of the Moderates and Extremists. He declared himself a disciple of Gokhale but he had nothing to do with the latter's constitutionalism. At the same time, though he took over the mass techniques of the Extremists, he had nothing to do with their extremism either. He was thus "Extremist" in method while being "Moderate" in aim, an extraordinary combination made possible by his fanatic insistence upon ahimsa, nonviolence. In this way he could carry the whole nation for a time at least. But we must here take note of the profound contradiction inherent in this Gandhian style of politics which was to have serious consequences for the future history of the country.

All of India's great political leaders had recognised that a forcible overthrow of the British government was impossible and that a peaceful struggle—passive resistance or satya-

graha, as it was later to be called—was a necessity for forcing the people's demands on the government and wringing out constitutional concessions from them. Tilak, perhaps the greatest of them, seems to have been clear, in his later years at least, that an extra-constitutional struggle could not in the very nature of things be an end in itself—for it would never of its own succeed in driving out an armed foreign government—but was essentially a powerful technique for securing increasingly favourable constitutional arrangements for the people leading finally to Home Rule and thence inevitably to complete swaraj, self-rule.

It was here precisely that Gandhiji's greatest limitation and most central failure lay. He seems totally to have missed the constitutional dimension of the struggle. It was this more even than his ahimsa that makes him appear somewhat like a general who can keep his men marking time but does not know where to march them for battle. And his ahimsa sometimes made him stop even their marking time just when they seemed ready to march on their own. He failed to utilise the strength and success of his 1921 movement to effect an advantageous settlement with the British. Nor did he know what use to make of the Montford arrangements, and the Swaraj party had to be founded by more capable statesmen like C. R. Das and Motilal Nehru so as to continue the struggle inside the council chambers with a view to showing its limitations and forcing further constitutional advance. Again, in 1930 the dazzling Dandi march did not lead to a triumphant Round Table settlement, but a delayed and solitary participation in the conference and a consequent failure. This dissociation between mass struggle and constitutional development in Gandhiji's style of leadership was at bottom a reflection of his inherent

blindness towards the strictly political aspect of things. It was this which made him seek an understanding with the Muslim League on the cultural religious level (Iswara-Allah Tero Naam) or on a personal basis (calling Jinnah, Quaid-e-Azam) instead of seeking it in a political understanding (as Tilak had done in the Lucknow Pact) based on the sharing of power between Congress and League. And some of those who strutted around him arrogantly behaved as though the League was not a political party at all. Failing such political understanding between the two, partition was inevitable, given the attitude of the British and the later intransigence of Jinnah.

The other great reason for Gandhiji's prestige and popularity seems to lie in his saintliness and moral stature, in his having brought something of the genuine spirit of religion into active social and political life on so large a scale. He was the first to reach the remotest peasant and to involve him by presenting the struggle as an ethical necessity rather than as mere self-seeking. More than anyone else, he created a fine ethos of lofty moral purpose and gave the sound guiding principle that the test of all policy is its benefit to the poorest peasant. But even his moral and religious leadership, remarkable though it undoubtedly was, suffered from a serious limitation. The spirit of religion that moved him was not the positive, vigorous and full-blooded thing of Vivekananda's conception or that of Aurobindo's, not that universal philosophy which is the acme of Hindu thought and which can and does inspire all, but a limited and largely personal creed that has appeal only to the specific "Gandhian" kind of temperament. But when every criticism has been made against him, the man himself stands untouched, pure and true.

The permanent positive contribution of Gandhiji seems to lie not in his ahimsa or his

political leadership but in something never recognised in his own life time—in his early and instinctive reaction to the alienation and helplessness of the individual under a wholly industrialised and commercial set-up, and his emphatic stress on lokniti, the organising of a vigorous local life and a strong and cooperative individualism to combat the arbitrariness of all power, political or commercial. This line of thinking, suggestive rather than definitive in Gandhiji, instinctive rather than intellectual, having received a more definite and intellectual formulation in the ideas of J. P. Narayan (who himself has been influenced by a yet greater thinker, M. N. Roy) has finally emerged as a force in Indian political life today.

The failure at the Round Table Conference marks the close of that phase of Gandhiji's career which was characterised by his absolute supremacy. The public reverence for a saint could not indeed be destroyed, but the limitations of his style now became increasingly manifest and his grip over the political situation was loosened and effectiveness in directing events greatly reduced. Though he remained to the end—and even beyond—a kind of figurehead for the Congress, its political decisions were less and less to be his. This process was to culminate in 1947 in vital decisions being taken without his approval or even knowledge. Outside India, Subhas Bose, bold and fiery, condemned him as "an old, useless piece of furniture", and jointly with Vithalbhai Patel demanded a change in Congress leadership. And within India, a band of fervent young men, ablaze with patriotism, launched into a career of manly suffering and lionhearted heroism which made the scruples of Gandhiji seem supine, effeminate and cowardly. The martyrdom of Bhagat Singh and Chandrasekhar Azad, who irrigated with their blood the parched soil of a drying strug-

gle, is one of the most stirring episodes in India's fight for freedom. And it went straight and deep into the public mind; it was an unforgettable inspiration, a thrilling example which attracted increasing numbers to the path of armed struggle.

To this threat of insurrection the British, shrewd and experienced, returned a powerful three-pronged attack aimed at division among the communities, division between the parties, and division within the Congress. Between Hindhu and Muslim was hammered with a few swift strokes the wedge of suspicion and estrangement. Jinnah was converted into an ally and, always advised by highly placed officials, his position eventually became such that all he had to do was to sit back with folded arms and, like de Gaulle, answer all Congress proposals with the single word, no. The wedge of separation sought to be driven into the Hindu fold through the Communal Award was, however, resisted by Gandhiji with a fast unto death and the British hand was timely stayed. This was to be Gandhiji's last great positive achievement.

The division between parties was brought about in the old way: neutralise extremism by some form of constitutional concessions. To this was now added the encouragement given to the princes to keep away from the proposed federation. To counter such divisive moves the vision and suppleness of a Tilak were called for. These neither Gandhiji, who operated at a level all his own, nor any Congress leader was able to provide. Gandhiji's satyagraha, a power in earlier days, was progressively emasculated to an individual and finally a solitary form.

The third prong of British policy, division within the Congress, was also not without success. Experience had taught the British the astounding truth that the most respected

leader of the struggling colony was concerned to maintain law and order no less than the alien government itself. Gandhi really meant the strange things he said, and he could be depended upon to settle for some moral issue of the moment rather than secure permanent political gain. The Congress party spoke in many different voices and the most dangerous of them, Subhas, must be kept either in jail or in exile. Its shrewd organiser, Vallabhbhai Patel, too, could not be taken for granted. Therefore, it was with Jawaharlal Nehru that the British established a close personal relationship, thus indirectly securing his ascendancy over other Congress leaders.

All this while a tornado was poised to burst over Europe, dramatically to alter the balance of political forces in the world. Ever since the great European Civil War (1914-18), Europe had been divided by bitter and irreconcilable antagonisms. The gravest and most basic conflict was with bolshevism which was felt to be a threat to the Western way of life, and this was a constant, if sometimes background, feature of this period. The more immediate problem was to heal somehow the breach between France and Germany. France, victorious but fearful, strove for security and reparations; Germany, defeated but aspiring, hoped for disarmament and equality. The French, allowed their way first, made such exactions on Germany that heavy borrowing and reckless spending made better sense to the Germans than conventional financial moderation; and one day this crazy imposture collapsed. Western capitalism went for a tailspin and millions were thrown out of employment. But nowhere was the misery so great as in Germany. Here was added the bitterness and frustration of defeat and unequal treatment to the social dislocation and economic chaos.

Therefore, as against Roosevelt in the

United States and Keynes in Britain, there arose in Germany a brilliant, intense and fanatic orator who swept the entire nation with his searing propaganda. Democracy, individualism, equality were symptoms of decay of civilisation; the race was supreme and its supreme will was expressed through the hero; the greatest race, the Aryan-German, must be kept pure and powerful so as to fulfil its civilising mission; it must re-arm and reconquer territories unjustly snatched from it; the Jews, who had brought Germany to this low state, as also their deadly and corrupting modern ideology, Marxism, must be wiped out. These ideas of Adolf Hitler, which expressed exactly the deep-rooted feelings of many a German who had watched with febrile anxiety the helplessness of "democracy" in the face of the rape of the beloved country, seemed to Western statesmen rather a bulwark against the virus of communism than a threat to themselves. Germany, they argued, had been maltreated; the French had been too impatient, too exacting. If now Hitler somewhat over-indulged this sentiment, it was only natural; a few timely concessions and he would be silenced and made to turn at last towards the dreaded USSR.

Thus the shameless policy of appeasement became respectable and Germany was permitted successively to repudiate the Treaty of Versailles, to re-arm itself, to defy the League of Nations, to swallow Austria and to annex Czechoslovakia. But when Hitler showed no signs at all of troubling Stalin and instead stretched his arm towards Poland, the West was alarmed. There could now be no peace even with dishonour; war could not be averted. But this was not 1914. Tank warfare and blitzkrieg had replaced the—by comparison—almost sportsmanlike trench fighting. The distinction between combatant and civilian had

been obliterated: it was total war, a bitter struggle for life itself.

In such a battle for survival, the British could not afford, at any cost whatsoever, to risk the neutrality of any colony and, therefore, without formality of consultation, India was dragged into a war which was none of its business and from which it had nothing to gain. The Congress reaction to this "humiliation" was a peevish satyagraha--resignation from the ministries. Thus was lost a position of manoeuvre, which could have been crucial in later negotiations, without creating in its place the support of an integrated mass movement. The mounting public discontent no longer received the solid and unified expression of earlier days. Hindu was divided from Muslim--Jinnah celebrating Congress resignation as Deliverance Day--and within the Congress itself the leadership was in total disarray. Gandhiji was no longer able to direct political events in any decisive manner, and Subhas who did offer direction and certitude was not permitted to function at all. Thus while the country was seething with discontent the leadership remained divided, confused and unable to give constructive guidance.

By the end of 1942, when the Congress had at last decided upon a definite course of action, its leaders were all rotting in jail, while Subhas had escaped abroad. Command over the movement and the internal situation had been totally lost. Indian independence now depended largely upon factors outside India's direct control. Either the allies would be defeated and Subhas would secure freedom, or the allies would be victorious but exhausted, willing to negotiate terms for their departure. The first, unlikely as it was, carried the possible danger of a bureaucratic and dictatorial socialism of the Russian variety; the

second, the certainty of the betrayal of the people and the movement. It has always been so. Whenever a movement ends on compromise or achieves success through outside forces it fails to secure its fundamental objectives.

The second great European Civil War (1939-45) destroyed finally the last vestiges of the moral authority of Europe and so exhausted Britain economically and psychologically as to necessitate a period of peace at home and abroad for her own development. The electrifying story of the heroism of Subhas Bose and his Azad Hind Fauj and the subsequent naval mutiny were unmistakable indicators that peace was the very last thing she would have in India.

At this juncture came into power in Britain for the first time a radical party of labour with "promises to keep and miles to go" - and it declared its intention to withdraw from India. It was plain that were the Tories to be returned to power such an opportunity would not easily come again. Therefore, among men advancing in years, who felt they had struggled enough, there was a disposition to compromise, to be "reasonable" and "practical". There was now no mass movement to back up their negotiations, the initiative had gone entirely out of their hands, and a new and growing factor had emerged in the inscrutable figure of Mohammed Ali Jinnah. So it came about that after a series of harrowing negotiations conducted in an atmosphere of increasing communal animosity, decisions were taken which were a betrayal of the fundamental principles for which the Indian Renaissance had stood and for which the freedom struggle itself had been waged. And thus it was that on a certain day in August 1947 "at the stroke of the midnight hour" when India was supposed perhaps to awake, her

noblest son had "run dry", a sad, tortured man.

Indian independence, a grant rather than a victory, a compromise instead of an affirmation, created a state more fundamentally contradictory than even the Mughal national monarchy. A "secular" polity that took its birth by acceding to the most blatantly communal principle of partition; a "federation" that refused to institutionalise the principle of state equality in its council of states (rajya sabha); a "democratic republic" which retained the repressive state apparatus, the preposterous educational system and the tardy legal processes of colonial days; and, the most criminal compromise of all, a "socialistic pattern of society" founded upon the land arrangements of the British.

Despite much legislation, neither Zamin-dari abolition nor "ceilings" have made much difference to the peasant. By offering compensation to the landlords, by permitting retention of Sir and Khudkasht Lands supposedly under personal cultivation, by perpetuating an impersonal, repressive and exploiting bureaucracy already hand in glove with the Zamindars—the vicious land structure has been indulged to establish and root itself with even greater strength and force than before; and now no mere legislation will ever change this situation. Today, as under the British, the peasant lives in the vice-like grip of the landlord and the moneylender, haunted by disease and famine, brutalised, degraded and dehumanised. Planning, much publicised as a panacea for India's ills, by evading this most fundamental of all issues, could act for some time as a palliative but has by now totally lost all relevance for the poor. Underlying this disastrous failure is a structural problem whose reality was recognised by even Galbraith, by no means a Marxist: "India has, in

fact, superimposed a smallish socialised sector atop what, no doubt, is the world's greatest example of functioning anarchy."¹

It is universally recognised that economic development can be sustained only by the performance of the agricultural sector, which after much laborious "planning" continues to depend upon nothing more profound than the weather. Growth of national income has come more or less to a halt, the per capita income has decisively stagnated and resources for development are wanting; yet there is a boom in the wasteful consumption of the upper classes and the draining away of resources for development into current consumption on this account. The latest statistics reveal that the share of the total national product of both the primary and the secondary sectors (agriculture and manufacturing industry) has been declining, whereas that of the tertiary sector (transport, communication and services) has been increasing over the last ten years.² And even within the tertiary sector it is the share of trade and commerce, not transport and communication, which has expanded significantly. An analysis of the stagnant secondary sector is also very revealing: there has been a relative decline in the investments in machinery and equipment and an increase in the expenditure on construction not related to industry and build-up of the production potential of the economy. Significantly, these trends apply equally to the public sector.

The structural aspect of our economic crisis now becomes absolutely obvious and evident. India today is not one nation but two, a nation of the poor and a nation of the

1. J. K. Galbraith, "Rival Economic Theories in India", *Foreign Affairs*, (July 1958).

2. See the "Quick Estimates of National Income in India in 1973-74" released by the Central Statistical Organisation of India in April 1975.

ich—a nation of the peasant, worker and lower middle classes, and a nation of the landlord, capitalist, speculator, smuggler. As Dr. Sau has brilliantly analysed it, the home market of the Indian industry is very narrow, the bulk of it being constituted by the feudal landlords and rich peasantry who consume as much as all the urban people put together. Moreover, he adds, their relentless exploitation in rural India sustains a steady supply of cheap labour for industry.³ Landlord and capitalist, therefore, are natural allies, literally made for each other. And the landlord, controlling as he does the rural vote, has become a support of political power. But the economic misery has become unbearable for peasant and worker and lower middle classes, and the psychological strain of indiscriminate westernisation has reached breaking point for the urban masses.

3. R. K. Sau, *Indian Economic Growth: Constraints and Prospects* (New Delhi: Orient Longman, 1973).

The essential point to grasp about the coming revolution is that it must involve, on the one hand, an expansive affirmation of India's true spirit and individuality and, on the other, a thoroughgoing transformation of the physical or socio-economic structure of her society. The cultural revolution must be along not the narrow, ascetic and "neti" byway of Gandhiji but the broad, comprehensive and life-affirming highways of Vivekananda and Aurobindo. The physical or socio-economic revolution must be built upon the alliance of peasant, worker and lower middle classes for the creation of a new polity of free and equal individuals. The task is gigantic but urgent, necessary, inevitable. The very survival of India's great civilisation and the future evolution of the world and humanity depend upon it. Therefore, the call of Vivekananda must once again go forth the length and breadth of the land: "Young men of India, arise, awake, for the time is propitious . . . Arise, awake, for your country needs this tremendous sacrifice . . . Arise, awake, for the world is calling upon you."

HARMONIC NEURONS

Willard Van De Bogart

It does not take very long after studying the evolution of man to realize that sound has played a very significant part in the development of his cultures. The esoteric literature which has filtered down through the ages presents one of the most comprehensive understandings of sound, as well as the medium of light, towards the furtherance of man's consciousness, his art, and the understanding of how to exist in many different time zones and spatial regions. It has been written that the use of sound in pre-Atlantean cultures, Chaldean cultures, and Essene cultures, enabled man to further understand how sound could be used for astral traveling, altered states of consciousness, and the reuniting with civilizations in other sectors of the universe. What was this understanding of the electromagnetic space-time spectrum which enabled these cultures to have a larger participation with our galaxy and the universe? The answers to how these cultures, and others of ages past, accomplished these feats may be lost forever. However, I say *may* because the new surge of consciousness expansion within the cultures of our time, coupled with very advanced technology, is revealing the complexities of the invisible world of subatomic structures which are responsible for the cohesiveness of matter and allows form and structure to be perceived by our own limited frequency range within the vast electromagnetic spectrum of sound and light.

Through optics research and spectral analysis from the Orbiting Solar Observatory, OSO No. 7 of the National Aeronautics and Space Administration (NASA), new knowledge concerning the composition and formation of the universe is coming about. It is interesting to note that vibratory sound-fields do exist within the subatomic worlds which in turn are responsible for molecular structures maintaining their specific particle configurations. The transcending from the micro worlds to the macro worlds contains the same ratios of particle configurations for all atomic structuring of the elements. This fact when applied to the specific area of neurophysiology reveals clues as to how the ancient cultures were able to enter other dimensions of time and space through the creation of sounds. The understanding

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of sound and how it relates to the mind as well as how it relates to the micro and macro worlds within the universe is essential in creating harmonic relationships which are responsible for giving matter its initial form. A sound is a frequency. A frequency is a term given to locate vibrations within a unit of time. To locate sounds in the audible frequency range, and then combining these sounds in such a specific way as to alter matter and participate in time dimensions, requires at first a feeling for the evolution of sound and how it is causing cultural transformations in the present day.

New technology or technology which represents the present-day state of the art in sonics, architectonics, electro-acoustics, and other areas of study related to sound, shows that man's behavior is affected very significantly by being immersed in a sound environment. The cultures of the past sensed this very well by creating instruments that were used as an integral part of the social structuring. Before the instruments came, however, it was the sounds of nature which began the education of the relationships of sound in nature and ultimately the learning of how sounds give nature its shape and appearance. It is also written that the creative force at work in its incessant task of transformation produces color, sound, and numbers in shapes or rates of vibration which compound and dissociate the atoms and molecules.¹

Everything in nature is producing a voice or producing a sound: the ocean with white noise as it meets the beach, the wind, and the city. The city is the thousands of years of man's evolution dealing with sound. Now the planet is laced with media machines that broadcast sounds so that all languages can be heard in any part of the world at any time. The planet earth is now a vibrating sound sphere amplified through the use of electronics. The cultures of today which have to live within this modulated frequency environment are being transformed appreciably. This new social structuring due to amplified frequencies can be one of the clues to an essential key to unlock the secrets of how the ancient cultures claim to have utilised sounds in such extradimensional ways. The sounds that man makes with his voice have been the predominate instrument. Language developed to repeat events in time. Before the scribes came to record, by whatever method, the vital information of the cultures, dialects and specific vocal structurings were created to suit the geographical area the cultures were living in at that specific time. Today, however, the satellites and microwave transmitters make it possible for all cultures to hear one another simultaneously. The planet earth is truly an amplified sound sphere.

In vibratory physics there is a field of study called electro-acoustics. This area studies the means of real time, electronic sound production, and the use of digital techniques for signal generation and control, especially intermodulation and voltage control techniques. Within the voltage-control technique category there are other new technologies being applied to vibratory physics such as biofeedback technology, to only mention one, but one that has

1. Helena P. Blavatsky, **The Secret Doctrine** (Los Angeles: Theosophical Co., 1925), pp. 463-64.

direct relationship in understanding how man can evolve by a better and more intelligent use of sound. It has been shown in biochemical laboratories that specific tonal relationships, or specific keys or chords can create patterns within the growth of tissue and cell cultures. It have also been determined that a continuous pulsating sound with a varying frequency for each individual allows the DNA-RNA helix to maintain its hellical shape. Harmonic relationships exist within the cellular structure of all living things. This fact brings us to the main point of the harmonic relationships of our own neuronal system. Thought itself is a frequency. There is first the formation of the idea which before spoken has to have existed within the mind as so many vibrations within a unit of time. The understanding of the real world, the world as we know it to function in, also requires so many vibrations within a unit of time, or real time, to allow us to have participation with this real-time world. Since the ratio of subatomic particle structuring and the macro universe structuring are the same, it then becomes apparent what it is necessary to do for an expanded conscious state to occur. As simple as it might seem, it is necessary to have harmonic thoughts or the ability to make harmonic associations between objects and events in real time. What is a harmonic association between an object and an event in real time? F, A-sharp, and D are notes which produce a chord which in turn is a combination of tones which blend harmoniously when sounded together.

In Paris the French composer, Pierre Boulez, director of the New York Philharmonic and BBC Symphony Orchestras, has assembled an international team to staff the Institute of Research and Coordination of Acoustics and Music (IRCAM). Boulez is interested in making the new computer and microelectronic technology available directly, and applying scientific techniques to studying the physical and psychological sides of music making. Boulez is going to use psychological methods to study how the ear perceives vibrations and how cortical processes work.

Boulez' work is an outgrowth of present-day cultures wanting to explore the subtle effects of sound on the human being. The awareness of harmonic relationships between objects and events in time is essential in accelerating the evolution of man toward becoming a more involved galactic participant. The vehicle which man has created for this accelerated learning is the media with its televisions, radios, and many other communicating devices. It must be realized that radio and television are two major media outlets which act as electronic extensions of our thought processes. When these two media outlets are modulated with destructive information and unharmonious sounds, it only follows that the whole planetary organism is affected in its seeking a positive growth potential. With the evolution of these media machines, and with the advanced electronic technology, the area of study with sound that has unlimited potential in bringing about the new-age visions of man is the cybernetic machine culture. The cybernetic machine culture is something very real in many ways when the structuring of social systems is compared to circuit designs and computer logic systems. The integrated circuits, which are becoming microelectronic, represent the opposite phase of the essential nature of the universe. The essential nature of the universe

brought about cellular structures through vibratory fields of electromagnetics. The mind has so developed that it can now phase in with the essential nature of the universe by creating its own harmonic oscillations through the use of computers and electronic synthesizing machines, which are necessary for originality of creative expression to flourish in the cybernetic machine culture. With the computer it will be possible to investigate the generation of sound processing. The computer will be able to process a program that will be able to combine harmonic structures and add overtones rapidly and in succession. The carbon family of elements have unique geometric organizations of their constituent parts. These particles, or parts, are in turn kept together with sympathetic vibrations. By associating a sound with subatomic particle configurations, the beginnings come about of hearing how sound is related to universal structuring.

The thoughts which man has produced are responsible for the established social systems of today which are in turn allowing man to continue similar patterns of thought production. Awareness of the environment is a basic prerequisite to maximize the mind in relation to the existing space a person is in. When an environment has sound structuring, or architectonic relationships, which are sympathetic with the structuring of the elements, then the mind of man will have reached that balanced oscillation of creating a technology that could enable participation with the very force-field systems which initially allowed man himself to join in this truly remarkable awareness manifestation called life. The wedding of the machine with man in this new cybernetic age has overtones of a new civilization which through time and historical events has naturally and with complete autonomy evolved itself into the next mental mutational state of man. The electronic sound sphere we are now living in is about to become a multiplicity of harmonic vibrations enabling man to reach those higher mental dimensional states. The awareness that the very neuronal structuring within our brain is the cause for this new civilization shows how there are a great number of harmonic relationships already within the mind. The biofeedback technology that has evolved on the planet is the cybernetic machinery that will monitor man's mental evolution with his technology until he joins in the causal forces of the universe. An incredible awareness comes about when meaningful associations are made with the functions of the various media technologies.

Audio synthesizers and video synthesizers are in turn the natural media inventions which are necessary in more complex sound and visual patterning. A computer assisted system of being able to participate in the evolution of man to the essential nature of the universe, along with biofeedback devices monitoring the mind, insuring that the entire physiological system is in balance and in a positively oriented direction, will be the technological evolution which will enable man to continuously create the new cybernetic machine culture.

Participation in the essential nature of the universe utilizing a more complex patterning of sound and light in the social structure will be a reality with the next transformed civilization. The media today are the precursors of the new-age man. It is the way in which the

media is utilized, however, which will determine the manner in which the transformation will occur. A high degree of consciousness must now be applied to the medium of the electronic media machines. McLuhan mentions that "the medium is the message". Many communication theorists feel the content is the affecting relationship between man and machine. However, the content can only have its existence via the modulated carrier waves that the message or content is on. When the information, message, or content has natural harmonious structural relationships then the very frequency that the information is on will create harmonic phase relationships with the frequency and amplitude modulations. Harmonic phase relationships in the media are a prerequisite for man to evolve. Therefore, it follows that the media deserves man's utmost attention. Our electronic extensions must have harmonic phase relationships similar to those that enable our minds to create harmonic relationships with sound. This is a responsibility for each and everyone of us if we are going to be able to give man a chance to evolve. The media is the mental analog to our own mind, and for this reason we exist in cohabitation; the machine and man exist together and for one another. A cybernetic harmonic sensitivity to the development of a hierarchical language system via the media in the cybernetic machine culture should be a basic awareness, as our evolution continues to bring us into an ever fuller comprehension of the universe and the space with which it is in.

A DAY MUST COME

Sanat K. Banerji

Disarmament

Disarmament implies either a limitation of the armed forces and weapons of war, limited by agreement among the nations, or else their total abolition. In its normally accepted meaning, the word is used only in the limited sense; for nobody has dared seriously suggest a total disarmament under the present conditions of the world's political and economic life. There may still lurk in the minds of a few idealists the view held by anarchist thinkers that the world may do without the necessity of any kind of coercion. But anarchistic thought is at a discount, and the total abolition of armies and armaments is completely absent from practical politics.

But a notable sign of the awakening that followed the First World War was an admission at least in theory that the arms race should be stopped and some attempt made towards partial disarmament. That was no

small gain. And this was the origin of the disarmament conferences. But even before the first of these conferences met at Washington in 1922 to delimit the unchecked expansion of naval power, the idea of curbing German military strength had been actually written into the Versailles Treaty. Germany was not to have any naval weapons of the conventional type, and her land forces were to be strictly limited for good. This idea of curbing German militarism and thereby securing world peace, as Sri Aurobindo points out, was a "foolish notion created by a one-sided propaganda, which imagined that the destruction of German militarism was the one thing needful and in itself sufficient to secure the future peace of the world".¹

This was a doubly foolish move. For in the first place, it created a false sense of security in the Western Allies, although it did not quite allay the suspicions of the French people and they readily voted for the expensive Maginot Line as a second line of defence. And secondly, it ignored the basic fact that unless adequate means were devised to keep Germany disarmed, the disarmament would be just a pious injunction that could be ignored at any opportune moment. It was probably imagined that the two great powers most closely concerned in the matter, namely

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1. Sri Aurobindo, *The Ideal of Human Unity*, centenary ed., vol. 15 (Pondicherry: Sri Aurobindo Ashram Trust, 1971), p. 455.

France and Germany, through the mechanism set up by the League of Nations or by direct mutual collaboration, would somehow ensure the observance of the treaty provision. But as tempers began to cool and the war seemed to recede into oblivion, the partners drifted apart and Hitler had his chance. The futility of this kind of disarmament, even when limited to a single nation, should have become more and more obvious as Hitler went unchecked in feeling his way to a complete and more formidable rearmament than had been undertaken by the Kaiser. Neither France nor England could make up their minds to stop this flagrant violation of the disarmament scheme, and the Second World War came.

In this context it might be worthwhile passing in brief review the history of disarmament proposals in modern times. They began in 1816, as a direct consequence of the Napoleonic Wars. The Russian czar made a proposal to the king of England that there be a "simultaneous reduction of the armed forces of every kind". The idea of an international disarmament conference was then mooted for the first time. But nothing happened. The next move in the direction of an international review of the arms race, which was a marked feature of the decades beginning with 1890, was made in the two Hague conferences of 1899 and 1907. In both these conferences, resolutions were adopted suggesting to the governments of the world that they consider the possibility of an "agreement as to the limitation of armed forces". Nothing was actually done by the governments concerned. The military budgets continued to expand, and the First World War followed.

The war brought a fresh awakening. The covenant of the League of Nations, in article

eight, expressed the view that "the maintenance of peace requires the reduction of national armaments to the lowest point consistent with national safety", and charged the League Council to formulate plans for such reductions. The final outcome of protracted negotiations for such plans was the convening of the first World Disarmament Conference at Geneva in 1932. The time was not opportune, for the world was passing through a great economic crisis. Nobody was then really earnest about endangering the security provided by armed forces. The basic question was how to allocate among the different nations, especially among the great powers, their respective shares of the world's armaments and armed forces. To allocate the shares would be almost equivalent to fixing for good their relative positions in the comity of nations; that is to say, it was left to the conference to pronounce as to who was superior and who was inferior in this sense. That was obviously an impossible situation. There were technical difficulties too which the military experts were bound to emphasise. The result was a fiasco.

After the Second World War, the United Nations made another heroic attempt. Article two of the charter authorised the General Assembly to make recommendations with regard to "the principles governing disarmament", and article twenty-six made the Security Council responsible for formulating plans "for the establishment of a system for the regulation of armaments". The various attempts made in accordance with the charter during the fifties when the cold war was at its coldest were inevitably bound to fail. Two disarmament conferences met. The one in 1960 included among others both the United States and the Soviet Union. The other, in 1962, had the leaders of both the blocs, but

France remained aloof. Nothing happened, except to underline the difficulties inherent in the scheme.

Earlier, in the inter-war years, an approach had been made, at the Washington Conference of 1922 and finally at the London Naval Conference in 1930, and some amount of agreement had been reached among the great naval powers to fix the relative strength of their warships—first battleships alone, and later cruisers, destroyers and submarines also. This was a great progress indeed. But in 1934 Japan resiled from its position with regard to battleships, and in 1936 it unilaterally withdrew from all its obligations with regard to other craft. The high hopes fell to the ground.

The only hopeful feature of the disarmament negotiations so far has been the partial success attained in regard to nuclear weapons. Test ban treaties have been signed. And the Strategic Arms Limitation Talks have of late been proceeding satisfactorily in the view of the negotiators. More may be hoped for in this direction.

But some important questions call for an answer. First, there is the question of control. Even assuming that the great powers agree to impose a ban on the use of nuclear weapons—no one has the temerity to suggest that as yet, but we are assuming that it will be at a future date—will the danger of a general destruction be over? "The terror of destruction and even of large-scale extermination created by these ominous discoveries", observed Sri Aurobindo in the late forties, "may bring about a will in the governments and peoples to ban and prevent the military use of these inventions, but, so long as the nature of mankind has not changed, this prevention must remain uncertain and precarious

and an unscrupulous ambition may even get by it a chance of secrecy and surprise and the utilisation of a decisive moment which might conceivably give it victory and it might risk the tremendous chance."² Will the great powers who sign the nuclear ban treaties submit to an impartial control and scrutiny exercised in peace time? And if they do, what happens when hostilities break out? Will the control remain effective, or will there be a frantic race to make up for lost time?

The question applies with an equal cogency with regard to conventional types of weapons and armed forces. Supposing that by a miracle of good sense a disarmament conference of the future does allocate the ratios and surmounts all the technical objections, what good will that do? For consider: "the limitations of armies and armaments can only lighten the national burden in peace, leaving it by that very fact more resources for the conflict. . . ."³ Technology will continue to advance. Research on non-conventional weapons, like poison gas for example, may get an added stimulus. And if war breaks out, the available technological and other resources, including manpower, will be thrown into the battle. England was a "peaceful" nation in 1914, and not so belligerent either in 1939; and so was the United States when it found itself called upon to join the fray. And what occurred when war came? Immense quantities of armaments and other sinews of war were turned out, and on both sides of the Atlantic millions of men were trained in record time to fight side by side with the professionals; even women were not excluded from active work in the field. What could a disarmament

2. Ibid., p. 565.

3. Ibid., p. 368.

agreement have done, had there been one in force? That necessity knows no law remains a valid principle in international relations. In war time we see it in its naked form, shorn of all camouflage.

And the most important question remains. Why should a nation willingly agree to forego its means of defence? It could do so only on two conditions. First, if it were fully assured of protection by another power or group of powers in case of attack. And second, if there was a general and complete disarmament on the part of all and there existed a single world authority that had in its effective control either a monopoly of arms or such overwhelming superiority as to make it invincible. The North Atlantic Treaty Organization (NATO) may perhaps be taken as an example of the security offered by a group of powers to its own members against attack by an outsider. But even under the NATO system, there has been no desire on the part of any of the nations who are guaranteed protection to forego their own means of defence. The reason is simple. NATO may dissolve at any time, and then the member states would have to fend for themselves, and they know it well enough. A complete disarmament on the part of all remains a chimera. "For so long as strong national egoisms of any kind remained and along with them mutual distrust, the nations would not sacrifice their possession of an armed force on which they could rely for self-defence if their interests or at least those that they considered essential to their prosperity and their existence, came to be threatened."⁴

This is really the root cause of the failure of disarmament conferences. And this cause will continue to operate until there comes

into being an international authority which "must hold under its command the sole trained military force in the world for the policing of the nations and also—otherwise the monopoly would be ineffective—the sole disposal of the means of manufacturing arms and implements of war. National and private munition factories and arms factories must disappear. National armies must become like the old baronial armies a memory of past and dead ages."⁵ How far away we are at the moment from this consummation marks the amount of progress that must be achieved in international relations before we can hope for a world free of the bane of war—assuming once again that there does not take place in the meantime a complete reversal in psychological attitudes on the part of humanity in general.

Nationalism and Imperialism

Then, if disarmament has been and would seem likely to continue to be a failure, and if all the other mechanics we have considered so far prove to be of no avail, where shall we look for a remedy? The true remedy can be found only if the causes of war are removed at their roots. But until that is made possible, or while efforts are being made in that direction, what are the more evident symptoms of war on which attention might be concentrated?

The history of imperialism in Europe seems to offer a clue. Imperialism as we know it has been a dominant feature of the late nineteenth and the first half of the twentieth centuries. It had its own characteristic features, but it really derived its inspiration and even a part of its methods from the great

4. Ibid., p. 461.

5. Ibid.

example of the Roman empire built and organised by Julius Caesar and Augustus Caesar at the beginning of the Christian era. "The example of Rome", as Sri Aurobindo points out, "has haunted the political imagination of Europe ever since. Not only has it been behind the Holy Roman Empire of Charlemagne and Napoleon's gigantic attempt and the German dream of world-empire governed by Teutonic efficiency and Teutonic culture, but all the imperial nations, including France and England, have followed to a certain extent in its footsteps."⁶

All the modern empires were created by force of arms; war was their initial starting point. But once firmly established in power, they strived for peace, not indeed between themselves but within the vast territories they governed. Pax Britannica, like its ancient counterpart, Pax Romana, was a fact, until the beginning of the twentieth century when it no longer sufficed to keep the subject peoples in check. For, the modern empires came up against a problem which the ancient Roman did not have to face. Except perhaps in Greece and Egypt, the Roman had to deal with half-civilised or inchoate peoples—clans and tribes—hardly conscious enough to assert their individuality. The modern European had on the other hand to keep under his control, except in the more primitive tracts of Africa and Latin America, peoples with a long tradition of culture, certainly developed enough to be independent of the European. And these ancient peoples were soon assimilating—first among the more educated of the Spanish-American races and later among the highly gifted intelligentsia of Asia and Africa—the principal ideas of the French Revolution of 1789 which acted as a strong

dissolvent. "The dominant idea of the French Revolution was the formula of the free and sovereign people . . . this idea became in fact the assertion of the free, independent, democratically self-governed nation."⁷

This created a problem. The empires had to exercise a vigilance over their borders and this led to a perpetual tension among themselves, a tension that finally burst into the two global wars. It also meant wars within the empire, at first in Latin America during the first two decades of the nineteenth century, and later in Asia and North Africa during the first half of the twentieth. The final result has been the breaking up of all the empires into independent nationalities. It is true that the empires have not abdicated willingly. It was mainly the circumstances created by the two world wars, aided in large measure by the nationalist aspirations of the subject peoples, that has meant their dissolution. Is it a good portent for the future of world peace?

There are two factors to consider. First, whether the division of the world into nearly 150 politically independent entities, "nations" for the most part in the accepted sense, is likely to minimise the chances of war. And second, whether and how far the "new imperialism", for the most part economic in its nature but with a tinge of the ideological and even perhaps a political element, will replace the old or is likely to be resisted and brought to an end. These are questions of a highly speculative nature, and only some general ideas can be put forward.

The emergence of the nation-idea was not only a historical necessity—it was the

6. Ibid., p. 297-98.

7. Ibid., p. 324.

natural culmination of the process that led from family and clan to tribe and city-state—it is also the assertion of an essential principle in the historical evolution of man: the formation of a stable unit of group-life. "The nation is at present the firm group-unit of the human aggregation to which all other units tend to subordinate themselves; even the imperial has hitherto been only a development of the national and empires have existed in recent times, not consciously for the sake of a wider aggregation as did the imperial Roman world, but to serve the instinct of domination and expansion, the land hunger, money hunger, commodity hunger, the vital, intellectual, cultural aggressiveness of powerful and prosperous nations."⁸ There are some who have not been happy with the immense growth in the number of new nations, for they feel that it is likely to emphasise rather than diminish the spirit of rivalry, and this may lead to wars. But it is also possible that after the initial period is over, they may settle down to a spirit of closer mutual understanding and interchange.

The important fact is that the empire idea has failed in creating a viable unit of human aggregation, and the nation-unit fills the gap—and may in the end prove to be the basis of a truly united human existence. The very name, United Nations, is symbolic of this possibility. Means of maintaining perpetual peace among the nations must be devised, under the aegis of this organisation.

The new imperialism unlike the old may help rather than hinder the cause of peace and may therefore prove to be more durable. For it is largely based on the principle of co-operation rather than coercion. The satellites

8. Ibid., p. 388.

who have grouped themselves around the Soviet Union on one hand and the United States on the other—none of them, to be sure, would like to be considered satellites—have a more or less pressing need to keep themselves attached to their "planet", even though at times they may have velleities for excursions, as in the recent instances of France and Rumania. And it is in the interests of the "planet" body to keep them at peace between themselves, and to win over the more oscillating ones outside their orbit by securing for them peace and economic well-being; the shuttle diplomacy of Dr. Kissinger has that as one of its primary objects. This adds to the cause of world peace.

"The real danger . . .", Sri Aurobindo warned in 1950, "lies . . . in the division of the peoples into two camps which tend to be natural opponents and might at any moment become declared enemies irreconcilable and even their common existence incompatible."⁹ The all-important question that stares us in the face is this: How far will the new imperialisms agree to accommodate themselves to the necessity of peaceful coexistence? Sri Aurobindo expressed the hope that "a world in which these two ideologies could live together, arrive at an economic interchange, draw closer together, need not be at all out of the question. . . ."¹⁰

Under what conditions this could become more and more possible, what are the chances of an early rapprochement and what might be its ultimate results are matters which we may take up on another occasion. Here it may suffice to say that the future does not seem to be as bleak as some may be inclined to think.

9. Ibid., p. 560.

10. Ibid., p. 561.

ENERGY, PETROCURRENCY, AND THE WORLD FUTURE

Robert Swann

The oil producing countries of the world, particularly those countries in the organization called OPEC (Organization of Petroleum Exporting Countries), may be in a unique position to help determine the answer to two of the most important issues facing the world.

One of these issues is the question of the source of the world's future energy supply. After the world's supply of oil has run out, will the primary dependence for energy be on nuclear power, particularly fission, or will it be on solar, wind or other sources of power which are ecologically safe and decentralized as to access to supply? The second issue is whether or not, or how soon, the world will develop an alternative monetary system to replace the present patchwork system with its worldwide inflation and increasing economic instability.

Situated as most of the oil producers in the Mideast are with the constant threat of regional, if not global war, they find themselves sitting on a tinderbox which could ignite the world, and not least of all because of the very oil which is their present source of riches. With 50 percent or more of the world's present supply of oil under their control and 90 percent of the world industry dependent on oil, they are in a position to control the course of history in constructive directions.

It is now a commonplace speculation that the United States will go to war over any ultimate threat to the supply of oil, even though the U.S. is dependent on OPEC for less than 10 percent of its total requirements (European nations and Japan are more heavily dependent on Mideast oil—for at least 50 percent of their needs). Some writers have gone so far as to predict that if OPEC were to demand payments in SDRs (Special Drawing Rights—the International Monetary Fund's "paper gold"), the United States might consider this "an act of strangulation" (see Terence McCarthy's article in *Ramparts*, March 1975). However, it is now clear that this fear is unfounded, for OPEC's announcement at the recent meeting in Gabon of its intention to do just that (price oil in SDRs) did not raise even a mild protest from the United States. On the other hand, there have been a number of

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pronouncements indicating great concern about any new price increases which might go over certain amounts (usually \$2 to \$3 per barrel). Such increases would presumably represent a threat to the U.S. economy which might be considered "an act of strangulation" to which Kissinger and Ford referred. A confusing element in the situation, however, is that it is also generally recognized that only if oil prices remain high will it be possible to economically tap the more costly sources such as offshore oil, which are supposed to make the United States less dependent on Mideast oil. Meanwhile, in spite of Project Independence (President Nixon's much advertised effort to make the U.S. less dependent), the degree of dependency on Mideast oil has increased and is now around 16-17 percent or more. How high prices can go and whether or not a certain price would be "unacceptable" and call for military action is a matter of debate. Less debatable, perhaps, is the proposition of another oil embargo—especially if it were to last very long.

However, if Americans could take an objective view of the situation from the position of the OPEC countries, it would be obvious to them that these countries which possess the oil under their feet consider it to be their major, if not only, resource, and must of necessity look with great concern on the fact that within twenty years or less, at the present rate of consumption, it will be totally gone. In return, they are being asked to accept U.S. dollars and other currencies, many of which are devaluing at such a rate as to be reduced to less than half of their present value within five years. Even if these countries invest (or "recycle") their funds as they are now doing, their returns in various parts of the industrialized world, at present rates of interest, represent only about half of the inflationary loss which is being sustained. Equity investments offer little or no better hope than fixed interest rates and in addition carry the danger of confiscation at any time by other national governments.

The alternative for OPEC countries is either to try and secure an equitable return in some form or to simply turn off the supply of oil which, by staying in the ground, can only continue to appreciate in value. Either alternative, however, is likely to be considered an act of "strangulation", which prompts the growing fear of many observers that any such move could lead to involvement of the major powers in a Mideast war—one which might be initiated by a pre-emptive Israeli attack on Syria, an act considered by many to be not unlikely.

While this threat is real and imminent, not only to the Mideast but to the entire world (with the possibility of nuclear war always present in such a confrontation), the situation, however, presents an opportunity to significantly redress the real source of conflict and to dramatize the desire of the OPEC countries to make constructive efforts towards world peace and economic stability.

Behind the fears of the industrialized nations about the economic effects of either another increase in the price of oil or the insistence on payments in SDRs (which, in effect, amounts to the same thing) there lies a deeper concern and a more widespread fear: The question of what will replace oil as a prime source of energy. Can adequate, safe alternatives be developed fast enough to replace the depleting supplies of oil? The power elite, both state and corporate, of the industrialized nations have clearly placed their hopes on

the development of nuclear energy. As it becomes clear to an increasing number of the most responsible scientists, economists and commentators that nuclear energy is not only highly dangerous but also economically unfeasible as a source of net output, anxiety and fear continue to grow about the future. OPEC countries must share these same fears and concerns with the rest of the world.

However, OPEC countries are in a unique position because they have not committed themselves to nuclear energy as the primary alternative to oil—even though U.S. nuclear salesmen, including former President Nixon, have been trying to sell them nuclear power plants. Also, many of the OPEC countries have unique potential for capturing the sun's energy in the vast deserts of their countries. This resource could be utilized for developing a safe and efficient technology for which a growing consensus of endorsements has begun to emerge. It is likely that hydrogen, stored as a gas or liquid and produced from primary sources of "income" energies (solar, wind, tidal, etc.), is the most hopeful alternative to oil, not only because its production will not be dependent upon limited sources of supply, but because there are no adverse environmental effects in production or by-products in combustion (see *Energy, Earth and Everyone*, Straight Arrow Press, San Francisco).

What if, as Dr. Arthur Tamplin suggested at the Japan Congress Against A and H Bombs in August of 1974, the OPEC countries were to announce their willingness to contribute some of their surplus funds into a new fund for the establishment of worldwide centers of research and development into such ecologically safe and universally available energy sources?¹ Such a policy would offer new security to the OPEC nations for energy self-sufficiency and economic well-being in the face of dwindling oil reserves. Yet, equally important, it would provide equity and needed leadership to all nations, particularly those of the industrialized world, in seeking new options for meeting future energy needs.

Closely related to the price of oil and the future supply of energy for the world's needs is the problem of building an alternative to the international monetary system. In the face of impending economic collapse beneath the combined weight of inflation on the one hand and growing unemployment on the other, the issue of monetary stability presses with singular urgency. Both capitalist and socialist countries (with the possible exception of China) are suffering from the ravages of inflation and appear equally unable to proffer effective remedies. Within the International Monetary Fund (IMF) itself, a continuing battle goes on between the countries demanding a "hard" or stable international currency, generally those countries with substantial gold reserves, and the developing countries who do not have gold or other hard reserves and who are demanding a more "liberal" system. The new SDRs, or paper gold, which the IMF began to issue in the early 1970s in its effort to increase world liquidity, have been a subject of controversy between the developed and developing nations from their inception. These new credits (literally new money but without gold backing) have been apportioned, as is usual in banking practice, according to the deposits at the IMF. Quite naturally, the poorer countries which have small deposits get fewer credits. They have been contesting, sometimes bitterly, this apportionment. But so far little change has taken place.

Nevertheless, the SDRs represent a step forward in world monetary affairs. They are

the first international or transnational currency to ever be issued, and since several relatively stable national currencies (German marks and Swiss francs for instance) are included in the index, or "basket of currencies", from which they are composed, they are a more stable monetary unit than some of the weaker currencies (such as the English pound) which are also included. Therefore, the move which OPEC made in December 1974 (and which some have feared may be the first step towards nuclear confrontation between the United States and Russia) to use SDRs in exchange for oil was a move towards greater use in international exchange of the first world monetary unit. All those who consider themselves to be "one worlders", or who assert the primacy of global interest over that of a single nation, should applaud this move on the part of OPEC, because it challenges the inviolability of the nation state as an economic entity.

Moreover, to the degree that the SDR is a relatively hard currency, it was a move towards not only a world economy but a more stable system as well. It puts pressure on those governments of the world, including the United States, which have been deliberately inflating their currencies to pay for politically irresponsible actions such as the war in Vietnam. Thus, those who demand stable money should approve the action of OPEC as a move which would help enforce fiscal responsibility. However, conservatives will justifiably insist that SDRs do not represent a genuine hard currency which in their opinion generally must represent some kind of gold standard or gold reserve. It is true, of course, that SDRs are not based on gold but are merely an index of sixteen paper currencies and ultimately do not have any redemption value, except in terms of other paper currency. Naturally, SDRs are vulnerable to inflation to the extent that nation states continue to inflate the constituent currencies.

Moreover, the broader use of SDRs may prove disastrous to third world countries inasmuch as their currencies are generally devaluing at an even greater rate than the dollar or pound (that is, if OPEC countries, most of whom consider themselves to be third world countries, or at least tend to identify with these countries, should insist on payments for oil in SDRs from the third world). When and if SDRs begin to replace national currencies in world exchange on an increasing basis, the weaker currencies which comprise the index itself will thereby tend to devalue even more precipitously.² The result will be increasing conflict between the hard currency nations and the soft currency nations within the IMF itself. SDRs will remain a currency for the industrialized world, not a currency for the third world.

No one can predict what the next step might be, but the course currently set clearly leads to international confrontation or at least a mutually unacceptable impasse. However, a unique opportunity arises in this situation for OPEC to explore a positive alternative. It could act in one stroke to: (1) protect its own interests in conserving the value of its money and resources; (2) move in the direction of a genuine hard currency which would not only satisfy most conservatives but establish a genuine world currency for the first time in history; (3) move toward economic stability and an end to money inflation on a world level; (4) promote a new basis for monetary relationships that would offer long awaited equity to third world countries.

The action to which I am referring would be following the suggestion of the Shah of

Iran, as the next step to call for oil payments in a currency denominated by an index of twenty to thirty commodities rather than SDRs. However, rather than manufactured commodities, the commodities which would comprise this index would be the twenty to thirty most important basic commodities used and needed by the entire world. Each commodity would be weighted in the index according to its importance in world production. This would include all of the important agricultural commodities as well as energy and mineral resources. Such an index, in fact, already exists, and is in process of being perfected. Present studies already clearly indicate that the index is itself a measure of world inflation. Basically, this means that ownership of the entire basket of commodities in the index would insure against loss from inflation. Any individual, group, corporation, nation, etc., holding title to the basket of these commodities would be protected against loss from money devaluation. This is true simply because it is money which is being inflated and devalued, not the commodities themselves

It may be true that in the past manufactured goods have tended to reflect relatively higher prices than the raw materials which go into them. But this has been largely due to the disparity in the labor cost which has gone into the manufacturing process, as against the labor and energy (mainly oil) cost for producing the raw materials in the third world whence most of them come. However, this disparity has already changed drastically, partly due to the higher cost of energy itself and partly to the increasing parity which agricultural products are commanding on the world market as an increasing world population demands more food from a stationary supply of land. And, in spite of the disparity which may have existed in the past, studies indicate that such a commodity index over a long period (thirty to forty years) has a remarkable parallel to national consumer price indices.³ Moreover, were such an index to be adopted for international exchange, this fact, in itself, would tend to decrease any existing disparity between "raw" and manufactured cost.

Were such an index of commodities to be adopted by OPEC (instead of the SDR index of currencies) as the monetary unit for pricing oil, a number of potential ramifications might derive from it.

It would, obviously, be a hard currency. While it might not satisfy all those who are insisting or demanding a return to gold as the unit for international exchange, it would in fact serve the purpose of an honest redemptive money system far better than gold—as a number of economists have been advocating for many years, from Stanley Jeavons in 1890 to Lord Kaldor in 1974 (in his speech to the IMF). Gold as a medium of exchange has a number of difficulties, prime among which are its limited supply and the fact that it is not distributed with any degree of equitability over the entire world. Raw commodities, of which gold is but one, are, however, available (particularly the agricultural commodities) over the entire world. There is hardly a country which does not have some commodity of importance in world trade which would be included in the index.

It is this latter point which makes such an act on the part of OPEC so important to third world countries. The result of such an action on OPEC's part would be to, in effect, monetize all the commodities in the index. The initial effect of monetization would probably be to raise the value of these raw commodities just as the value of gold in the world trade

is increased because it has monetary value in addition to its industrial use value. This monetary value has been calculated to be at least 50 percent of the market value assigned to gold.

The second important effect it would have on the third world countries would be to provide them with a source of "foreign" exchange without the need to export special crops and commodities to the industrialized world at depressed prices. Foreign exchange is, after all, exchange which has acceptance value in international trade. Generally speaking, this means hard currency, with gold as the most acceptable, dollars (particularly since the Bretton Woods conference made dollars official international reserve currency), pounds, and the more stable currencies. Developing countries lack foreign exchange because their own currencies are soft and, therefore, not acceptable. However, since these commodities belonging to the third world would have been monetized in world monetary exchange, they would now represent an international reserve currency, or foreign exchange, which could be used to purchase whatever might be needed for further development. Third world countries could, in effect, create their own foreign exchange. This would also mean that they could concentrate on their own needs rather than become caught in a one-crop economy primarily designed to export for foreign exchange—such as Brazil with coffee or Africa with cocoa. This does not mean they would necessarily cease to grow these crops, most of which they do not consume in their own country, but rather would be enabled to diversify their economy and concentrate on crops to feed their own people rather than for export. Further, they would have more resources within their own economies to encourage industry and otherwise stimulate development.

Monetization of domestically produced commodities could have the same or better results within any given country as the effort to nationalize at the state level might have, in that it would utilize resources more for internal use and benefit rather than for export. This could be of particular importance to small countries which, due to the lesser diversity of their available resources, do not benefit as much from nationalization as do large countries. For example, look to the difference between Cuba and China. Where the size of China provided great diversity of resources and made it possible to virtually eliminate the need for foreign exchange after the 1948 revolution, Cuba, by contrast, was forced to export sugar on the world market and continue its dependence on foreign exchange just as it had endured before the revolution—although perhaps not to as great an extent.

I do not mean to imply that all these benefits would come simply and easily by the mere act of OPEC requiring payments for oil in an index of commodities. In fact, it would require a great deal more. In order for such a commodity unit of international currency to become fully workable it would require, at minimum, a redemption system. That is to say, unless payments were to be made in the actual commodities themselves (as a barter)—an obviously unworkable system—it would require the establishment of some kind of world bank prepared to issue the new currency, just as the IMF issues SDRs today, and to redeem these notes in commodities on demand if necessary. Without such a redemption system there could be no credibility. Essentially it would require a "bank of issue" much like the IMF is today.⁴

There are several channels through which this might be accomplished: (1) OPEC establishing its own bank for this purpose; (2) the United Nations establishing a bank; (3) the IMF and the World Bank converted to such a purpose; (4) any combination of primarily third world countries which possess the basic raw materials which comprise the basket combining to initiate a bank; (5) a combination of private interests establishing a bank in one of the smaller countries (perhaps Luxembourg or the Bahamas) where international banking already is concentrated.

It is not the purpose of this article to discuss in any detail the possibilities and problems which each of the above options might entail, but only to emphasize the potential benefits to the world which a move by OPEC in this direction might mean. Already, we have seen discussion on the part of bauxite producing countries about the possibility of combining to establish a monetary unit based on bauxite which in their opinion would not devalue and would assure them of value received. Bauxite, however, could hardly become a world currency—although it might be as “good as gold” were it not for the mystique attached to gold. In my own view the United Nations might be the best organization to launch such a new world bank. Unlike the World Bank and IMF which are still dominated by the industrialized countries, the United Nations is largely controlled by third world countries and since it is they who would benefit primarily from such a bank, it would seem more logical to expect the United Nations to be a more receptive forum for its introduction. Moreover, it has facilities and resources with which it might launch such a large undertaking. (Recent proposals within the United Nations to try and force the World Bank to be more representative of third world interests may succeed. If so, the World Bank may become a better possibility than it is now.

Were such a commodity currency adopted, a number of other advantages could accrue to third world countries. For example, it is recognized that interest rates for present “soft” loans to the third world are not high enough to offset the inflationary loss, and it can be inferred that a form of subsidy is being given these countries. At the same time it is also true that these countries cannot afford the interest even at present rates, low as they may be (relative to inflation). Why is this so? I suggest it is true for several reasons. One of the reasons is, as already stated, that a primary inequity between the third world and the industrialized world is that the former countries cannot monetize their commodities under the present world monetary system. A second reason has to do with the approach to investment which has been adopted by the World Bank during the first twenty years of its existence. This policy has been to invest in large-scale infrastructure systems (roads, dams, harbours, etc.) and in industries which do not “pay off” in terms of increased production except over many years. These large-scale projects require enormous amounts of capital but provide very little or no immediate return. On the other hand, if investments are made literally “from the ground up”, first in agriculture and second in industry, then more rapid progress is possible without inflation. To some degree, such a policy has been recognized by the World Bank in recent years. Even so, only a small part of its investment goes in this direction. Were a policy to place agriculture first adopted, it would also have tremendous implications for the world food crisis.⁵

In order to avoid the difficulties which have attended past World Bank policies of placing its major investments in capital intensive long-range infrastructure and, in any case, so as not to duplicate these investments, the UN sponsored bank might concentrate its effort (allocate new credits) in the rural sectors, emphasizing as its first priority the small farmers and small industries in the rural areas. To accomplish this most effectively it might utilize the voluntary or non-governmental agencies which work with the United Nations but are independent of national governments. Such agencies are already deeply involved in rural development and many of them have helped create cooperatives and credit unions among rural populations. These organizations would be the most effective place to start making rural loans. Some World Bank projects have already utilized this channel, but it remains underused and is the most hopeful starting point for rural revitalization—linked as it often is with access to international resources of knowledge and intermediate technology.

The mechanism for such loans would be a rediscount system—creation of new credits—directly to the credit unions, cooperatives, etc. In this way, new credits would be created for short-term productive loans, rather than long-term loans for which SDRs are now being created. What this means is that, assuming a low default rate (and Food and Agriculture Organization statistics indicate that such small agricultural loans on a world basis are better risks than industrial loans), literally unlimited amounts of new credit could be issued since the short-term productive nature of the loans would offset the otherwise inflationary nature of unlimited credit.

Moreover, since these loans would increase world commodity production and since investments in the bank would be redeemable in these commodities, interest rates on these investments could be kept very low --if not eliminated. Investors, or depositors, unlike their counterparts in the World Bank, could always redeem their investment in either commodities or national currencies but, in either case, would not be losing any of their capital due to inflation. Because their investment would be "inflation proof", they would not need, or demand, a high interest rate, since interest rates on today's market are generally high in order to offset inflationary loss. Quite obviously, low interest or no interest rates would be of great assistance to the third world countries. In fact, some securities, or bonds, could be issued by the UN bank which, like U.S. Government E Bonds, would not carry yearly interest rates but would be redeemable in five to ten years for principal only. Such bonds (long-term loans) would be important in providing the development time necessary for new technology transfers—particularly in the field of low impact energy technology (i.e., solar, wind, hydrogen).

But the ability to issue unlimited new credit for short-term productive purposes should be emphasized as the most important of all the advantages which such a new bank would have. Not only would it be possible to issue new credit for direct crop loans, but it could also issue credit for commodity storage purposes—one of the most critical issues for the developing world. Farmers, in particular, are throughout the world handicapped by the fact that at harvest time they must sell their crops at depressed prices which always climb rapidly after harvest. Cooperatives for storing grain and other crops could obtain newly created credit from the UN bank for this purpose and thereby improve the return to small

farmers virtually without risk.

Beyond local storage systems, large international storage systems for holding buffer stocks (in order to prevent unfavorable short-term price fluctuations) of all the basic raw materials produced in third world countries could be developed without the need to raise all the initial funds from dollar savings, or other hard currency, of the participating nations. Such a project is now underway within the UN Conference on Trade and Development (UNCTAD) which is trying without too much success to raise several billion dollars among both developed and developing countries for initial investment in stocks. If such a bank as is being proposed here were in effect, then the commodities themselves could be contributed by the developing world and treated in the same way as currency deposits are treated at the IMF. That is, as the commodities are deposited, new credits (in commodity currency) would be issued to the depositing countries which could be used by them as foreign exchange—in the same way SDRs are now issued and used.

There are difficulties, of course. The most serious technical difficulty which has been raised whenever such a proposal for "commodity money" has appeared, is that the commodities used for redemption, which are perishable, could not be stored economically and would be expensive to maintain. This objection was raised at the Bretton Woods Conference in 1944 when a commodity money system was proposed as the alternative to John Maynard Keynes' proposals for what eventually became the IMF. As with gold, the proposal is generally considered conservative and is generally disliked by the majority of economists who are followers of Keynes and who advocate that "a little inflation is a good thing". (Today's Keynesians may not be quite so certain that this is true. At least it is not clear that "a little" inflation can be certain to remain "a little".)

There are, however, several possible solutions to this technical problem. For one, it is not likely that the bank would have to keep a large amount of all such commodities in storage for redemption purposes. Most likely, if redemptions were demanded, they would be requested in the form of one of the commodities easiest to store—gold, for example. Most of the reserves, therefore, could be kept in precious metals for redemption purposes. Secondly, it probably is feasible to maintain storage of most perishable commodities (grains, etc.) in "ever normal" graneries from which old supplies would be continuously withdrawn and new supplies added. In fact, the international buffer stocks already discussed and which are now being developed by UNCTAD could become part, if not all, of the reserves required. Such storage systems might be located in strategic places around the world and would be used to stabilize prices of commodities as well. Stabilizing commodity prices would insure against depressed prices to third world countries, and would also stabilize the commodity index as a monetary unit.

In addition, there are at least two other possibilities for solving the storage problem, which would not require storage at all, and which would be very inexpensive to maintain. One possibility is to use the futures or forward markets by simply holding contracts in the commodities involved. The second possibility is the use of arbitrage markets whereby contracts for commodities in transit would be held by the bank without storage cost. Since these two possibilities offer the simplest and least expensive method for "storage" during the initial

period of development, they are presently being investigated and tested by a private company to determine their feasibility.

The most serious problem, however, would not be technical at all, but would be the effect and reaction within the industrialized world. Although the transfer of the responsibility for initiating an honest, non-inflationary money system from the OPEC countries to the United Nations would make it difficult if not impossible for the United States (or any other industrialized country, or countries) to go to war in a vain effort to protect its economy, it would not obviate the disciplining effect on the industrialized world such an action would exact. Inevitably, as the new currency became the established standard of value—perhaps the most acceptable currency in international trade—all currencies would tend to be measured by this standard. Currencies such as the dollar and the pound would be devalued as no longer acceptable in international trade—unless they were able to maintain their internal value, as in the case of the Swiss franc. To accomplish this, politicians within the industrialized world would be forced to reduce or eliminate the waste spending which presently prevails—from the production of unnecessary military hardware to proliferating bureaucracies. This disciplining of politicians and the ending of a waste-oriented society might be painful to the over-indulged members of industrialized society. But it is a discipline which is inevitable in any case, because exponential growth of waste and pollution is impossible. Only ecological disaster lies down that road as any number of writers on the subject have been endlessly repeating (*Limits to Growth* et al.). Better than that the discipline be imposed by economic necessity rather than ecological catastrophe, which might be irreversible (such as continuously increasing radioactive waste from nuclear power plants, or climatic changes from urban and industrial pollution).

Moreover, new hope for human life and the human spirit lie in the direction of such discipline. We will all be better off when we are forced to recognize that the end of life is not consumption, but rather in being genuinely productive in human and creative ways. Third world countries will have provided a great service if they force the industrialized world to make such a change in its attitude and institutions before ecological disaster brings the necessary changes.

Other difficulties may be in getting OPEC countries and third world countries to see that their own future lies in joint action, as President Houari Boumediene of Algeria has been suggesting to his partners in OPEC. If OPEC remains isolated from other third world countries it will remain vulnerable to pressure and/or military action from the United States and other industrialized countries. Third world countries, on the other hand, must realize they cannot win in the game of development as long as the international monetary system is stacked against them.

Let us assume, then, that the OPEC countries as a whole, or any combination of them, are interested in making a contribution not only to their own welfare but to the welfare of the world as suggested by the foregoing discussion—what might be the appropriate move on their part?

1. They might announce to the world, as soon as possible, that they are prepared to invest

and/or contribute funds from their surplus capital in a world development program to create adequate alternative energy sources. Such a proposal might be on condition that European and other countries join with them in a proportional investment, but not conditional on the U.S. or USSR participation. All countries, however, would be invited to join and all contributors would have easy access to the results of development programs.

2. Simultaneously, they might announce a willingness to invest in a new world bank, perhaps sponsored by the United Nations, which would denominate its loans in terms of a group of commodities, or an index, including agricultural goods produced by the third world.
3. At the same time, in order to reduce world tension and the threat to the economies of the industrialized world which the price of oil represents, OPEC countries could also suggest that they were prepared to accept a negotiated agreement on the base price of oil within the context of a bilateral arrangement with the major industrialized countries (United States, European Economic Community and Japan) provided that: payments for oil, once a base price had been agreed upon, would henceforth be denominated in SDRs as a first step, but within an agreed-upon period be denominated in an index of commodities to be determined by a world bank established under United Nations auspices.

Such a step would appeal not only to the American people, but the people of the world as a fair and just step. Adoption, then, of the proposals suggested could have the following beneficial effects:

- Reduce the possibility of war in the Mideast and the ultimate danger of nuclear confrontation for which the entire world would suffer unimaginable consequences.
- Relieve the anxiety on the part of both oil producers and oil consumers regarding the end of oil supplies by the year 2000.
- Relieve the anxiety, rapidly growing in the United States, about the dangers and shortcomings of nuclear power as (at present) the only alternative source of energy. (Further, it should be pointed out that neither third world nor most European countries has either the capital for purchasing nuclear power plants—even if they should want them—or the capability for developing adequate alternative sources of energy.)
- Offer hope to third world countries caught in the trap of dependence upon outside sources of foreign exchange and also provide a new source of direct loans at very low (or no) interest.
- By helping to initiate such a move towards stable money on a world level, OPEC countries would not only protect their own investments against inflationary loss but would

become heroes to all those people in the world who recognize that runaway inflation is as much a disaster as worldwide depression—to both industrialized and non-industrialized countries.

- Strengthen ties with European countries which are presently almost entirely dependent on Mideast oil supplies. Such European ties could help provide resistance to U.S. and USSR military adventurism—as well as give pause to Israeli military assumptions of U.S. support for its own military adventures.
- Initiate a process of disciplining the industrialized countries, short of ecological catastrophe, to reduce waste and pollution, and begin to live within their means.

Notes:

1. "To implement the second recommendation of the Pugwash Scientists, the oil exporting nations of the middle east should add an excise tax to each barrel of oil. The tax could be as small as 5 to 10 cents per barrel. This tax money would then be used to support one or more Solar Energy Institutes.
"Such action on the part of these nations would, in my opinion, be a most significant step toward world peace. Moreover, it would allow them to exploit their most abundant resource—solar energy. For example, solar energy can be used to generate the electricity—the electricity can be used to electrolyze water—then using only a small fraction of the desert areas of the middle east, more Btu's could be shipped from this area in the form of hydrogen than is available in the oil reserves. Moreover, solar energy can be used to create fresh water. It can also be used to construct and operate an extensive agricultural system of greenhouses in which this fresh water can be recirculated. In addition solar energy systems would be far more useful to the undeveloped nations than the expensive, sophisticated and dangerous nuclear reactors." The foregoing is taken from Dr. Arthur Tamplin's "Open Letter to the 29th Anniversary Conference Against A and H Bombs."
2. It should be noted that the *New York Times* of May 7, 1975, carried a front page article on the adoption by the IAIA—the International Airlines System—of SDRs for making payment on all international flights.
3. The most recent studies (*New York Times*, May 25, 1975) by a UN team of economists, mostly from the third world, unanimously reported that in the last twenty-five years the prices of raw materials exported by poor countries have risen at about the same rate as manufactured goods—even though oil was excluded from their studies. However,

they did report that "these terms of trade were subject to substantial short-term fluctuations". It is these short-term fluctuations—due to seasonal harvests of market variations—which often cause the most havoc with poor countries and it is partly to avoid such variations that this proposal is aimed.

4. It may be argued that there is no absolute guarantee against the possibility of inflation under such a commodity backed system, because the issuer could, in theory, over-issue the currency just as nation states do today. It is true there is no absolute guarantee. However, two factors would make it far less likely: (1) there would be no political motivation involved to make over-issue attractive—even SDRs are unlikely to inflate from over-issue since no political faction would benefit from doing so; (2) redemption: although it may be argued that redemption is not likely (who would want to redeem easily transferable currency for hulky commodities—even gold?) nevertheless, the possibility or "threat" of redemption remains valid—just as the threat of redemption in gold forced President Nixon to close the "gold window" in 1971.
5. See "World Lilliputs Hold Answer to Famine Threat" by Edgar Owens, an official in the U.S. Agency for International Development, *Washington Post*, October 13, 1974.

CURRENTS OF EVENTS

Ronald Jorgensen

1976

Toward a Four-way Harmony

This is a peculiar time, its wealth of such great promise and its meanness of such crippled quarreling. There are a number of ways to see it: as a falling away from the recent gains toward global cooperation and eventual unity; as just a chance playoff of many forces with no final progress or collapse; or as the natural increase of resistance before an irresistably approaching unity overwhelms it in the oceanic harmony of a new world. A study of history alone, although its convergence in evolutionary lines propels us toward a conclusion of union, cannot decide. Nevertheless a historian with the glint of prophecy, of prescience, makes a difference. Certainly Mr. Varinda Tarzie Vittachi, a very interesting *Newsweek* columnist, must have felt so in the magazine's 17 November issue when he quoted Arnold Toynbee's belief in the future:

We are now moving into a chapter in human history in which our choice is going to be, not between a whole world and a shredded-up world, but between one world and no world. I believe that the human race is going to choose life and good, not death and evil . . . I therefore believe in the imminence of one world, and I believe that, in the 21st century, human life is going to be a unity again in all its aspects and activities. I believe that, in the field of religion, sectarianism is going to be subordinated to ecumenicalism; that in the field of politics, nationalism is going to be subordinated to world government.

How much distance will be traveled inward, first, then outward, toward Toynbee's surety in this opening year? The situations which can be expected to provide working material for some of the journey look both difficult and promising—a combination capable of evoking the best in men.

There is the obvious and often urged just adjustment between the developing South and developed North where a touchy stage is being reached. In the annual convention of the National Foreign Trade Council in New York—where the pressure on appearances was lower

and the agenda free of North-South concerns and obligations—third world so-called demands were frankly described as “a threat” to the “international economic system” (*Indian Express*, 19 November 1975). This tendency in perception seems to now be increasing, and probably will moreso before it is resolved into harmony.

Demanding continuous attention like the North-South situation, the Israeli-Palestinian-Arabic interface seems more like diplomatic wrestling lately, which approaches and falters in front of a solution again and again before realizing its destined formation of Semitic fraternity. Currently there is a faltering into national petulance—something like, A: “We will never accept B”, B: “We will never accept A”—which does not look like it will survive throughout the year.

More interesting indications of the situation in the Asian subcontinent than the very visible Pakistan-India accusations, are developments like the quietly growing concert of the Asian Clearing Union, comprising the central banks of Bangladesh, Pakistan, India, Sri Lanka, Nepal and Iran (*Indian Express*, 29 October 1975). This is only one of several initiatives of cohesion being taken more and more authoritatively by these states and Thailand, Burma, Singapore, and Indonesia.

In South America the maturing Andean Pact, known as Latin America’s common market, now appears to have brought its members—Chile, Bolivia, Peru, Ecuador and Columbia—to a threshold of at least a collective survival after the last six years of nationalistic anxieties. Joanne Omang, in the 17 November edition of the *Indian Express*, reports that they want to plan production amongst themselves so that

an Ecuadorean drill factory, for example, can produce all or most of the drills needed by the 73 million residents of the Andean region.

They have scheduled the disappearance of tariff barriers on nearly 2,400 products, effective by 1982.

A collaborating initiative amongst the Balkans, which have been so successfully divided that their name has become a definition for it, has been made by Greece. She has invited the nations of the area to a preliminary conference on cooperation (*Indian Express*, 17 November 1975) which Bulgaria, Romania and Yugoslavia have accepted. (At this writing there is no word whether the meeting, expected to take place before the end of the year, has yet happened.) The Greeks feel that Turkey, notwithstanding the Cyprus impasse between them, will also come. And Albania, expected to refuse because of her principles of foreign policy, politely declined, say Athens officials, while tendering expressions of goodwill and a desire to strengthen ties with Greece. The reporter observes:

There has been nothing like this since the communists took power in most of the region after World War II.

Looming above all these situations is one which hasn't made any direct news yet. Nonetheless, it is sensed as a gigantic force swirling in eddies of covert preparation that sounds nearer and nearer to the eventual thunder-fall of disclosure on the ordinary political level. It is the coming of four nations in a circle together: India, China, Russia, America. Among the most interesting observations in 1976 will be those identifying some signs of accelerations toward this less distant eventuality.

Of course it looks impossible now, just as Russian-American detente looked several years ago; and as Chinese-American rapprochement looked only two years ago. But another way to see it is that precisely this detente and rapprochement were the first two stages toward such a fourfold gathering. Certainly they were the two most improbable stages—after all, the hostility between Russia and China (two communist states), the animus between China and India (two Asian states), and the uneasiness characterizing the relations of India and America (two democratic states) are, by comparison, more like ups and downs among relatives in extended families. Family quarrels, admittedly, can be supremely persistent. But the momentum of what has already happened will continue to gather—despite the levers and motives of realpolitik—and the limits of resistance will become more patent.

You may have read about the somewhat amusing exchange three of these powers had in a recent UN debate regarding South Africa. It was carried in the 12 December *Indian Express* and, true to present-day form, was maneuvered into mutual recriminations on Angolan interference where the USSR, the United States and China were each guilty, then innocent, by turns—depending on who was talking. But what is most interesting about this contest is its national, not international, lens.

National Lenses

In a period of remarkable global progress which has been sealed with an at least operational though at times nervous international peace since the Arab-Israeli battle and United States-Vietnam war concluded, a person would probably take national domestic peace and stability for granted—for it is a truism that international amity can hardly be even imagined until the evolutionary aggregate of the nation is widely and reliably formed. What we have in the past few months—led by Angola who is (not so) incidentally also a master catalyst of international friction—is a run of domestic shakeups of the old and advances of the new which relay across the earth something like the belts of faults joining continents on an earthquake map. Plucked from their dispersion in weeks of newsprint, they make a formidable list.

New Zealand: After a fresh interval of government by the Labour Party in the past few years, the country reversed itself sharply in a recent election (*Indian Express*, 12 December 1975) to a restrictive and inbred program of the "New Zealand, the way you want it"

National Party. It looks like a swing back from a greater opening than could be assimilated; so another vein of preparation must now be laid.

Australia: The fact that her relatively tranquil domestic political history has been buffeted by a stalemated parliament, budgetless government, and a dismissed prime minister by the queen's representative just before her biggest landslide election to date suggests that Australia's structures are being encouraged to change.

Portuguese Timor, Pakistan, Bangladesh and Laos: They are all passing into a great flow of forces for change. In Timor it has taken the form of civil war; Pakistan's opposition forces are reported to be moving toward a national protest day on December 19th in a situation that the British Broadcasting Corporation insists is more serious than anything since the 1971 war with India (*Indian Express*, 8 December 1975); Bangladesh seems to be carrying the world's burden of political assassination within its borders for the present; and the *Hindu* of 4 December succinctly states:

The 700-year-old monarchy in Laos has been abolished, the 19-month-old coalition government dissolved and the Laos Peoples' Democratic Republic established, Vientiane radio said today.

Japan: She has faced the shock of possibly her first massive strike by public employees in essential sectors (transport and communications) and it was an avalanche. Nearly equivalent to a civil skirmish in other countries, it intimates an accelerating change from her once immovable socio-economic ethos.

The Soviet Union: In one way it seems a small event, but this is the first time since the revolution in 1917 that a church has been built in Russia. It is going up in Moscow for the 1980 Olympics, and must be suitable for all faiths (*Newsweek*, 27 October 1975).

Great Britain, Portugal, and Spain: There are very familiar tremors.

Yugoslavia: This experiment is quiet and a bit unexpected: it is an attempt to change the means of democratic process from that of population representation to delegation representation. Put differently, representatives who are responsible for all levels of the nation's government are not elected to exercise their own opinions in place of voters; instead, they come from labor or resident associations—small ones which cover the land—and can only put forward the positions of their associations with which they must continuously consult. It means in essence that all of the millions of people in Yugoslavia have a direct bearing on all decisions made and action taken. As we stand for a moment in the limited truth of the democratic ideal, this Yugoslavian progress is remarkable for something not yet even approached in the capitalist democracies. The experiment was reported by Milan Danovic in the 29 November *Indian Express*.

Albania: China's close associate has experienced her first shakeup since breaking with the USSR about fifteen years ago, according to an 18 November piece in the *Indian Express*. Even this news is vague, however, going no further than a statement admitting "major government changes".

Lebanon: The interesting thing about this civil war is its surprising effect on PLO commandos, who now wish it to stop without another day's shots; for its ferocious existence now affecting Jews in addition to Muslims and Christians may have mortally injured their arguments for a secular Palestinian nation where Muslim, Jew and Christian would peacefully cohabit (*Indian Express*, 8 December 1975).

Israel: Social violence and tendencies toward anomie are reported to be increasing in a piece entitled "Disregard for Authority" in the *Hindu*, 2 November 1975.

Nigeria: A government purge was executed in the aftermath of the recent coup, where almost 4,000 civil servants were ousted on grounds of corruption, inefficiency, et al. (*Indian Express*, 18 November 1975).

Rhodesia: Now our expectations are confirmed in a Nkomo-Smith accord, the fruit of many long and thin years and an instrument of a fundamental change in Rhodesia's destiny.

Ecuador: Her leader is readying to quit, this time because the population's rising opposition to military dictatorship is demanding civilian rule.

We could go on, but it appears that this is just what will happen in 1976. That is, the accustomed processes seem magnified to explosive reshapings, sharply difficult and sometimes regressive assimilations, expansive progressions, quiet mutations: they are unstoppably underway in the benevolence of national forges on each continent. "Benevolence" because can you imagine what human life would be like if these impolite refinements were being made on an international scale? Now that a new stage toward international harmony is being reached, lacunae like the big-power policies intruding upon the Angolan conflict can be worked out more locally and with more constraints in a national setting. At the same time a much more settled nation-state basis for the next international progression is being prepared. When it is adequately ready, a strong and integrated nation will not attract the atavistic international policies that now intersect Angola so notably. Through these cloudy national lenses one can see possibilities that are otherwise invisible.

14 December 1975

REVIEWS

The Biology of God, by *Sri Alister Hardy*. London: Jonathan Cape, 1975. 238 pages, £4.50.

Sri Alister Hardy has a great deal of experience in using the scientific method and in this book he is applying it to the primordial problem of man's religious sense.

What are we really doing in our religion—are we manufacturing illusions to persuade ourselves that there is no death and oblivion or are we making contact with a force that can take us safely beyond life as we know it here? It is only today that we are really beginning to think objectively about this, and Sri Alister Hardy is one of the foremost pioneers in this field.

After describing his scientific approach to this emotional subject, the author claims to be a Darwinian accepting natural selection and adaptation as key factors in the now-established theory of evolution—selection being the key to the physical side of evolution. Whereas this seems to many to indicate merely a material process self-perpetuating and requiring no directing power, Sri Alister sees further and notes that behaviour is a vitally important feature of the whole process, that consciousness is an important factor in evolution and these points take us beyond a merely material activity. This view seems to verify Arnold Toynbee's hypothesis that civilisations survive in proportion as their motivations are spiritual and altruistic.

Discussing religion in the making, the author describes a "something" in our make-up which represents a divine reality behind the multitudinous manifestations of ordinary daily existence, and he quotes what Aldous Huxley called the perennial philosophy; this includes "the ethic that places man's final end in the knowledge of the immanent and transcendent ground of all being. . . ."

I myself believe this concept of immanence, the indwelling of the Creator within everything created, to be the hypothesis which gives the greatest intelligibility to most of our evidence of human experience. In today's terms, this immanent driving force is expressing itself through countless millions of brains, animal and human, every single one of them being a computer programmed from birth to death: the individual feeling of free-will is entirely subjective in a process of individuation leading to Self-knowledge—this Self being the immanent or indwelling Creator engaged in projecting a film of unbelievable complexity involving the sun and earth and the ionosphere as a kind of vast valve or television tube in a process of cosmic television.

This concept of Immanence seems the only one sufficiently comprehensive to allow

for the materialistic machinery and the findings of mystic and imaginative or spiritual insight—and to explain both the insect and Beethoven.

Sir Alister, in describing our Wordsworthian feeling for Nature stresses that this apparently solid Nature is really only whirling particles or waves of energy. "It is the picture produced by the rays of light focused on the retina—and modified in the brain—that we see, not the outside world as it really exists. . . ."

After dealing with the relationship between psychology and religion, Sir Alister tackles the paradox of parapsychology. Under this heading, he includes extrasensory perception (ESP) incorporating telepathy, clairvoyance and precognition. He also refers to psychokinesis, the alleged influence of the mind on physical objects.

I must admit to being still a little dubious about the validity of this branch of enquiry as the concept of universal immanence can account for all the above phenomena. If each and every brain contains a kind of audiovisual tape of the individual's life as triggered by the genetic hierarchy in a transaction with the environment, there is no difficulty in seeing how telepathy, precognition and clairvoyance work. They are simply predetermined to express themselves in unison as the occasion requires, whether the occasion consists of experimenting scientists miles apart or meaningful coincidences. There is no need to postulate other hypotheses or acausal effects. The whole would be rooted, like dreams, in the individual subconscious, rooted in turn in the collective unconscious in the overall stream of life or energy deriving from the Maker or First Cause.

In the chapter "Towards a New Natural Theology", the author states: "I believe the Divine spirit—the spirit of life—the *entheos*—the *elan vital*, call it what you will—brought about the organic evolution through the action of Darwinian selection." If we follow this to its natural conclusion we must acknowledge that the creative force behind it all animates and directs the sinners as well as the saints and so must be a symbiotic union of both God and the Devil in a further religious reduction to genuine monotheism.

Finally, he recommends an experimental faith using prayer to acquire or release fresh rejuvenating energy. I must admit to finding this difficult—the Maker seems to delight in playing cat and mouse with humanity—but for those who have the humility it may very well work wonders as Sir Alister claims. He concludes that the systematic study of the experience of God can prepare the ground for a religious faith in harmony with the true spirit of science, doing real justice to man as the religious animal. He regards this new approach as vital to appease the frustrations of our now spiritually bankrupt civilisation.

Desmond Tarrant

Desmond Tarrant is an English poet and critic. He is the author of James Branch Cabell: The Dream and the Reality, and has contributed reviews, articles, and poems to a number of periodicals internationally.

Plato on Man, by Athenagoras N. Zakopoulos. New York: Philosophical Library, 1975. 147 pages, \$ 7.50.

"This study investigates the psychological man embedded in Plato's writings rather than his more obvious views on man as a moral being or social or political animal" begins the introduction to this book. Yet, in fact, the author's concern is even more tightly collected around what has apparently been his leading theme in scholarship and teaching for about the past decade: the nature of the very soul itself.

What this portends is a work of delicate and thorough, patient scholarship; for Plato was not a man to systematically exhaust any one issue before moving on. Those with some familiarity with his voluminous dialogues know he strolled in and out of one subject after another, not very intent on consistency in some instances, and any study such as the author's would have to take the entire pages' perambulation to glean all of Plato's brilliant shards into the complete vessel.

Dr. Zakopoulos first surveys Greek thought, departing from Homer, and when he arrives at Socrates it is clear to him that the pre-Platonics had no developed, lucid idea of the soul and its nature. In Plato himself the author ventures steadfastly and minutely into the questions of its nature, origin, parts, relation to the body, and immortality. The weight of scholarship is carried fairly well, which is not a light compliment, for approximately one fourth of the expository pages are consumed by footnotes. He concludes in a trio of appendices by attempting to relate Plato's "psychological" perception to its theological surround, to Freudian personality-thought, and to the behaviorists and "Third Force", humanistic, psychologists.

Zakopoulos seems to accept that "psychological" label for discussion of the soul no differently in essence than Plato would have: he speaks of the higher part of the soul as its "mental energies". Despite occasional more intuitive, minor strands in the presentation the author, who is a priest, apparently considers mentality the limit of soul capacity in the world—apart from its more abstract quality of self-motion. As far as it goes the work is careful and solid—summarizing and comparing the best scholarship in this field with infrequent statements of his own views. Perhaps in the future Dr. Zakopoulos will widen his exploration to consider more intuitive and mystical investigations—Western and Eastern—of the mysteries of the soul.

Ronald Jorgensen

A writer and editor, Mr. Jorgensen has regularly contributed articles and reviews to World Union during the past two years. A project he is presently working on is the compilation of quotations from all cultures and eras on oneness.

FOCUS

WORLD UNION INDIA CENTRE

The unity of all the nations is the compelling future of the world. But for the unity of all nations to be possible, each nation must first realise its own unity.

*

Even as the individual has a psychic being which is his true self, governing more or less openly his destiny, each nation too has its psychic being which is its true self moulding its destiny from behind the veil; it is the soul of the country, the national genius, the spirit of the people, the centre of national aspiration, the fountainhead of all that is beautiful, noble, great and generous in the life of the country.

the Mother

The constitution of the Indian national centre of World Union was finalised on 1 November 1975, after fully taking into consideration all the points of view expressed in the following: the First National Convention of World Union Centres in India held at Bangalore last June; the executive committee meeting at Bangalore on 10 June 1975; comments received on the amended draft, which was circulated among members of the executive committee on 30 September 1975.

The national centre's formal name is World Union India Centre. It will work within the geographical boundaries of the Indian Union, as a unit of the World Union International Centre at Pondicherry. Headquarters will be located in Bangalore presently, but could be shifted elsewhere, should the India Centre so resolve in a general meeting and gain approval for this resolution from the World Union International Centre. The objects of the centre shall be set within the fulfilment of the International Centre's objects. These objects are articulated in the organisation's constitution.

Any person who is moved by the ideals of establishing a new world order based on oneness, peace and harmony as described in the objects and rules of the World Union International Centre will be eligible for membership. Persons of all nations, eminent for their knowledge of or contributions to the objectives of world union, shall be eligible to become honorary life members.

The administration of the centre shall be vested in a central council consisting of these national officers: president, two vice-presidents, two secretaries, and a treasurer; also, one of the national members of each of the state centres and the national president are authorised to make certain nominations. The past president of the national centre shall be a member of the central council. Chairman, vice-chairman, general secretary and other office bearers of the International Centre, and its honorary life members shall be ex-officio members of the central council.

The first national president of the centre is Prof. N. S. Govinda Rao, 88 "Naladurga", Diagonal Road, Visveswarapuram, Bangalore 560004. The central council is now being formed in accordance with the provisions of the constitution. In due course, the India Centre will contact other World Union centres, publish the constitution as a booklet and acquaint World Union members with its activities.

During its first five years, the India Centre will concentrate on national integration, or unity within India. Such a policy will be followed in cooperation with governmental and non-governmental organisations having similar aims and also with individuals interested in the work of unity within India. We are confident that Prof. Rao will do what is needed to establish a tradition and conventions for the proper functioning of the centre. The India Centre's meetings will generally be held along with the national convention, expected to be a biennial event.

As a new development in World Union activities, World Union India Centre contains the promise of a significant contribution towards the process of national integration, with the cooperation of members and centres throughout India. This is an essential work if India is to play her true role in the process of world unity, if humanity is to make an orderly progress towards a higher destiny.

THE NEXT FUTURE

The decision has been taken to publish a souvenir volume for the fifth triennial World Union conference of 8, 9 and 10 January 1977 announced in last month's journal. It will contain selected articles regarding the conference theme, The Next Future, and advertisements. Advertisement rates are Rs. 600 per full page; Rs. 350 per half page; and Rs. 200 per quarter page. We invite World Union centres and all friends to offer their full support to make the souvenir issue successful. Names of potential contributors may be offered for consideration, and centres and members are particularly requested to help arrange for advertisements in this effort.

THE WORLD GOVERNMENT PARTY

Formed in Sri Lanka by the educationist Mr. Bandula Sri Gunawardhana, the World Government Party will be working to help change the UN into a more powerful and effective organisation that will itself become a legally binding world government. The party's *World Government Journal* is already being published. Also, a World Government Fund has

been established to enable the party's work and goal to become known on what Mr. Gunawardhana terms "a massive scale". The next task seen by the party is the development of branches in other cities, and in towns and villages in Sri Lanka and other countries. Further details are available by writing to Bandula Sri Gunawardhana, World Government Party, 270 Park Road, Colombo 5, Sri Lanka (Ceylon).

KARL HEUSSENSTAMM

Karl Heussenstamm passed away prematurely and suddenly in an automobile accident on 19 October 1975. Mr. Heussenstamm was a great friend and supporter of World Union; in the United States, particularly in California, he was one who represented and worked for it. Two of his books were published by World Union: *Reflections of a Universal Idealist* and *Towards the Maitreyan Revolution*. He was earnest in attempting to make people aware of the advent and working of a new consciousness. In fact, he wished to retire from his regular occupation and devote the whole of his time to support forces which promote a new consciousness and a new world order.

ORGANISATIONAL ACTIVITY

World Union Centres

Baranagar In its November meeting of the 9th, members hosted a gathering including representatives from four other centres: Alambazar, Barasat, Calcutta and Sodepur. The occasion for this was their consideration of a report on the newly conceived World Union Cultural and Economic Council, which is to be sponsored and founded by five centres of West Bengal before moving toward a nationwide body. Forthcoming developments of this scheme will be reported in "Focus".

Earlier meetings were devoted to talks on Tantra sadhana and on Sri Aurobindo's book, *Lights on Yoga*.

Calcutta Meeting about the proposed Cultural and Economic Council (described above in the Baranagar report), the Calcutta Centre unanimously decided to fully and actively support the council in its work of implementing the ideals of Sri Aurobindo and the Mother in cultural and economic betterment of common people.

Hyderabad At a lecture meeting on 4 December, two talks were heard. A major address by Sri Samar Basu surveyed some political and yogic dimensions of Sri Aurobindo's work and its impulse into the founding and development of World Union. The other address dealt with organisational aspects of World Union and the concept of unity going far beyond humanity to all of Nature and even existence itself.

North Calcutta Their twentieth meeting, 20 November 1975, was particularly rich in music, readings of poetry and prose, and group concentration. The centre's women's wing met on November 23rd, deciding to start a children's educational centre. Their aspiration is to help children develop into adults with a spontaneous perfection of being and seeking.

United Kingdom This is the first report from the centre in Great Britain, and involves a series of meetings. Part of their emphasis has been on poetry and music, on news and information about the building of Auroville, and on the Ashram.

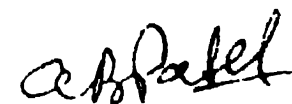
The centre's discussions are full, with the participation of virtually everyone present. Some issues have been the tension between freedom and societal, governmental conformity; causes of loss of individual freedom; and the inappropriateness of (negative) criticism in this work because of its often divisive effect.

Members decided the best way to increase their membership strength is by "pure meditation"; it has no limits, unlike other methods.

Uttarpara Their women's wing met on the 15th of November when a talk on "initiation into the yoga of Sri Aurobindo" was given. The centre's new homeopathic medical service unit has opened. Its date of inauguration was 23 November 1975. Dr. Sadananda Bhattacharya, who has freely offered to manage its units, spoke about how to serve the people—which he will be doing. Sri Samar Basu commented on Sri Aurobindo's views on medicine, particularly those on homeopathy.

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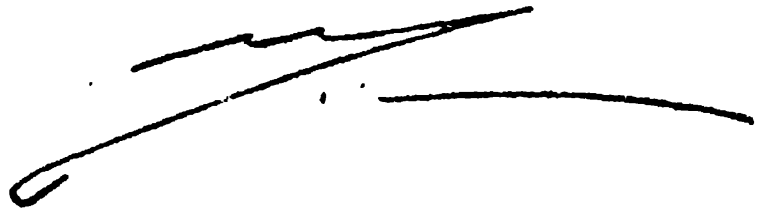
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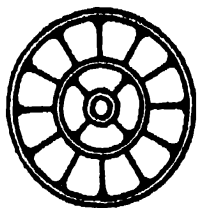
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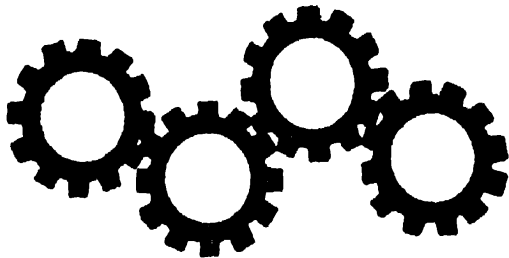
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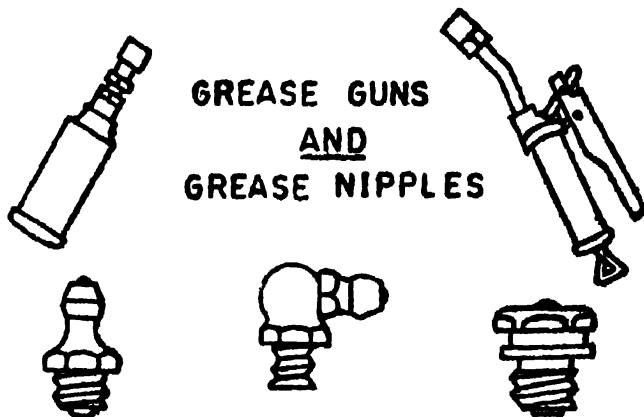
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Edited by M. P. Pandit

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EDITORIAL

Theosophical Centenary

The Theosophical Society is to be congratulated on the occasion of its completion of a century of useful service to mankind. At a time when the traditions of the East were practically unknown in the West, it was the early Theosophists, Madame Blavatsky, Colonel Olcott and Annie Besant, who spearheaded the introduction of the religious, cultural and spiritual concepts and practices of the Orient to the widening Occidental mind.

They initiated the age of common understanding and mutual broadening, and helped to popularise the spiritual knowledge of the multiple planes of existence, the worlds of those planes and the possibilities of interchange between them. They unveiled the mysteries of after-death experiences and reincarnation to a considerable extent. Significantly, they underlined the universal base of all religions and set a premium on reciprocal tolerance and understanding.

Not all may accept their readings and interpretations of the occult side of life nor the importance they gave to this aspect of human evolution. And some may perhaps find their approach more mental than soul-oriented, their light more vital than spiritual. But all will agree that within its limits the Theosophical movement has served the world well.

United Nations' "Failures"

When Golda Meir, the former Israeli prime minister, says that the United Nations wrote itself off the day it allowed the Palestine Liberation Organisation to participate in General Assembly deliberations, we can put it down to political pique. But when Dr. John Coats, international president of the Theosophical Society, claims that where the United Nations has failed, the society has succeeded, it calls for a response.

Dr. Coats says that the United Nations has signally failed in promoting world unification and human brotherhood, and that the Theosophical Society has done so. There appears to be some oversimplification in such a suggestion.

There are indeed many movements in the world, which have not been obliged to enter the realm of international politics, that have served the cause of human unity—the Theosophical but one amongst them. Indeed, the United Nations and its related agencies themselves have done remarkable work in areas where politics does not directly enter—perhaps much more, in fact, than all the private bodies combined. If the United Nations has not succeeded in a larger measure in the most difficult field of international politics, it is largely because the mentality and attitude of the participants has not undergone sufficient change. And for this failure of change, a cause is the relative inability of organisations like the Theosophical Society to effect an adequate widening in the mind and consciousness of mankind. Religions, spiritual movements, and efforts toward moral reformation have not yet made any substantial liberating impact on the ego-mind of collective man.

It is naturally more helpful to look to the positive gains registered for humanity by the United Nations than to the imperfections of its working. It is the responsibility of all who strive for a united world to positively contribute to the creation of a climate in which the United Nations can function more effectively in international relations as well.

M. P. P.

THE SYNTHESIS OF NATIONS

Donald Keys

The planetization of our consciousness—expressing our oneness with humanity and accepting the whole planet as our home—involves a process of change to be undergone both by ourselves as individuals and by our largest functioning groups, the nation-states. *The stages of this process are essentially the same for individuals and for nations.* In both cases, this change is manifested by the gradual emergence of the same qualities: community mindedness, inclusiveness, and shared responsibility.

As individuals, we must struggle to end the "divided house" of conflicting goals, wishes and desires within our personal lives. We must struggle to harmonize and integrate our many subpersonalities—the local dominions within ourselves—whose conflicts dissipate our energy, by preventing its effective focusing and expression.

The same is true with nations. For example, divided energies in the national life may be represented by the many internal groups which have different and conflicting values, concepts or goals. Thus, the energy of an ethnic or minority group which has urgent unmet needs will be largely lost to the nation until that group is accommodated and its reasonable needs satisfied.

Or, powerful special interest groups can be laws unto themselves in the corporate personality of national life. Thus, for instance, economic interests with narrow and self-oriented goals often wield sufficient power to convince the leadership of a nation that their wishes and well-being represent the interests of the nation as a whole. They "impose" their value system on the society and interfere with the direction and utilization of energy, distorting the note sounded by that nation. In this instance—and, too often, in general—the leadership of

President of the International Center for Integrative Studies in New York, Donald Keys also serves as the registrar of Planetary Citizens. For the last six years he has been the representative of the World Association of Federalists at the United Nations. Mr. Keys co-edited the book God and the H-Bomb, and has contributed to other volumes and journals on world affairs. Adapted from an address to the seventh Menninger Conference for the Voluntary Control of Internal States, this article is published here with the gracious permission of the author and of Synthesis: The Realisation of the Self.

a nation is narrowly *identified* with a particular group or tendency. It is the same as with an individual whose personal center, or sense of self, is habitually identified with only one, or at the most a few, of the many elements or tendencies within the personality.

In both cases--individual and national— *disidentification* is needed, and leads to the emergence of the true identity: one that is capable of accepting and integrating all separate elements. Only when such an integral self-identity is established and a self-actualization process entered into—whether consciously or not--can the individual or the nation begin to climb the Jacob's ladder of more appropriate energies—those with higher intensity and value content—and to express them in the individual life or in the world community.

The qualities or energies which nations present to the world and to each other give clues to the "place they are coming from" collectively speaking—to when the dominant emphasis is on the personality wishes and desires of the nation, and when it is beginning to show evidences of response to some deeper pull within the national being; when the nation is fundamentally materialistic and self-centered, and when it is identified with the good of the whole.

It may be very difficult, looking from within a particular nation, to distinguish among the tendencies in other nations, for precisely the same reasons that a self-centered personality cannot secure an accurate impression of those around him, but rather projects his own attitudes on others. From a transnational vantage point such as that afforded by the United Nations, where the behavior of each member state is easily seen, it is not as difficult.

Many of the large and industrialized states are primarily interested in the maintenance of privilege. Many of the smaller and newer nations are naturally interested in a world system which would supply them more equity and justice than the present one does. Some newer countries tend to exhibit a spontaneous idealism and concern about the world community as a whole. And a few are unique in their commitment to general world well-being, often at considerable sacrifice to themselves. Their enlightened international policies are based on the will of populations which support world-order values and goals. These countries particularly, and others, show evidence in specific and important respects of the birth of a planetary sense of responsibility—which a very wise person has said is "the first indication of divinity". A comparison of the voting behavior of the member nations at the UN will easily demonstrate the values by which nations live and through which they express themselves in the world community—which often, unfortunately, is at variance with their public pronouncements.

To what extent are nations prepared to relate to the world through values of caring and sharing? To what extent are they prepared to express communion rather than charity? Planetary identification rather than separative selfhood? By these measures one can determine

when nations are still using old energies marking the nation-state as tribal God, and when the newer energies related to the human community as a whole.

The condition of nations presently is often not very encouraging; and if we were to measure progress toward planetary consciousness only on the basis of national behavior, we might often be downhearted. Not so long ago I had a good visit with one of the top people in the secretary-general's office, an extraordinarily ebullient person, especially for someone who's been with the UN for about twenty-five years. He said, "You know, Don, I've never been so optimistic." "Optimistic?" I said. The Middle East was about to flare up again, the Vietnam war was in full swing at the time, things had been going from bad to worse at a number of different places. He said, "Ah, but you don't understand—these are the frictions brought about by the shrinkage of the globe which we're experiencing. They are inevitable surface confrontations. These are not the long-term, deep-lying trends. The deeper, persistent trends have to do with all this business of knitting the world together, of growing transnational activity which is beyond the control of any special group."

Fortunately there are many elements to the picture and many processes in motion which individual nations do not and cannot control. Some of these factors are historical and technological; others are psychological and even transcendent. Together, they are fostering the emergence of a new consciousness. We are, as a result, facing a situation absolutely unprecedented in human history:

It is an amazing thing that in less than a million years the human species has succeeded in covering the earth, and not only spatially. On this surface that is now completely encircled, mankind has completed the construction of a close network of planetary links, so successfully that a special envelope now stretches over the old biosphere. Every day this new integument grows in strength. It may be clearly recognized and distinguished in every quarter. It is provided with its own system of internal connections and communications, and for this I have for a long time proposed the name "noosphere."¹

The noosphere in fact physically requires for its maintenance and functioning, the existence in the universe of a true pole of psychic convergence: a center different from all the other centers, which it supercenters by assimilation: a personality distinct from all the other personalities it perfects by uniting with them. The world would not function if there did not exist somewhere ahead in time, in space, a cosmic "Point Omega" of total synthesis.²

No one has more adequately or more eloquently sketched the existing situation than did

1. P. Teilhard de Chardin, *Activation of Energy* (New York: Harcourt, Brace, Joranolich, 1970), p. 285.

2. P. Teilhard de Chardin, *Human Energy* (New York: Harcourt, Brace, Joranolich, 1969), p. 145.

Pierre Teilhard de Chardin, in the above words, written prophetically many years ago. Mankind is clearly moving, willy-nilly, towards that one united body, through the construction of a seamless web of planetary interconnections which is beyond the domination of individual nations. Man, the species, is in the amazing process of becoming self-knowing and self-aware. He is waking up as a global entity—a Rip Van Winkle who has been asleep for millions of years. For the first time in all human history we as individuals can consciously participate in human-Humanity relationships. We have the possibility to describe, delineate and experience the participation of the Individual within the global entity. This is, without doubt, the most staggering event of human existence. Man, the magical weaver is spinning out of himself the planetary nervous system—the neural network. He is traveling anywhere at a planetary constant—the speed of sound. He is communicating anywhere at a universal constant—the speed of light. He is no farther from any member of his race than the electrical distance of his finger from his brain. The same time span for communication is all that is required. What is immanent as a result is the organization and birth of a new entity—World Man.

The sudden discovery and understanding of planetary ecology is intrinsic to this development. Ecology is nothing less than the science of the wholeness and relatedness of all planetary life. We find ourselves the custodians of a living spaceship, and understand for the first time the real meaning of the world being round. Man the individual set off across the globe, and now he has met mankind coming back. His new meaning, his deeper meaning, lies in the whole of which he is inescapably a part. The activation of the noosphere—the neural envelope of the Earth—and the discovery of ecology mean that mankind as a whole is on the "path of return": he is *consciously* engaged in simplification and in reintegration into that of which he was at one time an unconscious part, and then later an estranged and prodigal son—reintegration into planetary life.

The evidence of this interrelationship and the obsolescence of separateness are everywhere to be found. Most dramatic have been the object lessons resident in environmental degradation and depredation: the bathtub ring around the Mediterranean, the acid snows of Sweden caused by sulphuric clouds from the Ruhr; radioactive fallout raining across the globe; exhaustion of fishery stocks; extinction of animal species; the energy crisis; the depletion of mineral resources. The newly discovered limits to food and natural resources and a host of other factors all indicate the sensitivity with which mankind will have to regulate his planetary interference and stewardship in the future. While World Man slept, spaceship Earth was on auto-pilot. In a half-waking state, he pressed some technologically augmented controls which have thrown the ship seriously off balance. Now in a full waking state, Mankind must accept the responsibility for his actions and consciously control and guide the planetary craft.

A positive response to the new interrelatedness and its consequences has begun. A UN World Population Conference took place in 1974 to sensitize the world to the limits of population expansion. Later that year a World Food Conference was held in Rome to begin the

long process of facing up to the question of dwindling stocks, diminishing arable lands and spreading famine. A Law of the Sea Conference was convened to establish laws and a mechanism for the governance of seventy percent of the Earth's surface and to provide for equitable use of its resources beyond the limits of national jurisdiction as the "common heritage of mankind". A major world conference on human settlements to treat the increasingly inhumane problems of urbanization—as serious for the developing countries as for the developed—is planned. A special session of the United Nations General Assembly—only the sixth such session to be held, was devoted to initial conceptualization of a new and more adequate world economic system. The rapid growth of multinational or transnational business corporations which are beyond the control of nations has caused the United Nations to develop a program for monitoring their activities and for elaborating a body of law governing such activities. This is not to say that the best deliberations of any of these efforts will be immediately and enthusiastically implemented by governments. Those which feel they have more to gain from the status quo in the short run (among which are many of the present heavily industrialized nations) will obstruct and delay such implementation. But in the end they will have no other choice.

The integration of World Man as a functioning being presupposes and implies a supercenter and a new energy which embodies centripetal, relational and purposive characteristics as well as inclusive love. Where do we look for these?

As regards a world supercenter integrating the localized centers of human action and organization, the United Nations is its representation in human affairs. The United Nations is an imperfect and partial manifestation of that transcendent supercenter, largely because the member nations are not yet ready, prepared or willing to see the UN become its fuller manifestation.

Nevertheless, the UN itself has become a vast drafting board for sketches and plans of a future world order. These plans are under preparation less because of any farsighted initiatives of member nations than because there are a large number of conscientious, world-minded *people* working in and contributing to the secretariat who share a common vision of a more effective and just world order. The United Nations is in fact elaborating a series of "departments of planetary management". They are embryonic, they are half-starved, but they exist; and at any time that nations can summon the global will to implement them, they can be brought into full function and full size. With some of them we have long been familiar, such as the World Health Organization, the Food and Agriculture Organization, the UN Development Program, the International Labor Organization, and the UN Children's Fund. Others, such as the UN Environmental Program and the UN Fund for Population Activities, are very new. The Regime for the Sea Bed is the most important new department currently projected. The sheer inability of nations to deal effectively any longer with any of their major problems on a unilateral basis, whether it be energy and resources, the world monetary system and inflation, peace and disarmament, or population and food, is forcing a turn toward

development of international organization and to processes related to and centered in the United Nations. The imperatives of the human condition and world conditions are forcing mankind along the path his idealism and vision have shown him long ago.

Is there also a special impingement of higher energy upon the United Nations as a vortex of human unification, representing a goal and purpose for human and planetary life? Can it be recognized, can it be tapped, can it be utilized? The answer is yes, beyond all doubt.

It is appropriate and useful here to take a concept from general systems theory and to note that when discrete individual organisms are approaching a time of organization into a superorganism, a new system of which they will henceforth be constituent members (as nations are now preparing for participation in a planetary structure), they create a unitary field upon which newer and more cohesive, inclusive, goal-oriented energies can impinge. Such energies must, by their very nature, be attuned to a higher goal, one that is new and as yet incomprehensible and unknown to any of the separate elements. The UN is the precise location where enough "inter-nation" substance is lodged so that it can provide a focus for the downflow and expression of such energies.

The preparation of such a "field" or focus is deceptively simple. Quite apart from the surface phenomena of the United Nations, the crises, conflicts and confrontations that get headline treatment, there is something else occurring which might hardly occasion comment, but which has a magnificent subjective component. It is the simple fact that the elements of humanity physically meet at the UN. For the first time in human history elements of all humanity can be found continuously in the same spot. The representatives bring the multihued waters of their national, ethnic and cultural lives and pour them into a common crystal bowl. Thus, the UN is a place where we can experience the first intimations of what humanity itself as an entity and a species really is. Humanity as differentiated from this person, that person, group, tribe or nation is a quantum jump different from anything heretofore experienced. It is not uncommon for visitors or short-term delegates to experience a sudden, overwhelming realization of *Mankind*—very similar to that which has struck moon-traveling astronauts.

In the United Nations secretariat staff we find mainly unconscious representatives of the energies of human unification. They are animated by it, act on it, but are not given to lives of contemplation or speculation. Their work, to which a large number are utterly dedicated, can be equated to continuous meditation on human unification, not in the abstract, but in action. Among them are the grand karma yogis of the age, who hear nothing, see nothing, feel nothing, apart from what they are doing to manifest the vision of planetary justice, freedom, order and peace.

Occasionally, there are conscious representatives of that process and of those energies. One most notable, who anchored the six-ton lodestone of pure crystalline iron ore in the UN

meditation room, was Dag Hammarskjold. Do you think he was not conscious of his inner reality and its relation to his world-serving role? Hammarskjold wrote:

You are not the oil; you are not the air; merely the point of combustion, the flashpoint where the light is born. You are merely the lens in the beam. You can only receive, give, and possess the light as a lens does. Sanctity either to be in the light or to be self-effaced in the light, so that it may be born. Self-effaced, so that it may be focused, or spread wider.

The uncarved block. Remain at the center, which is yours and that of all humanity. For those goals which it gives to your life, do the utmost which at each moment is possible for you, without thinking of the consequences.³

Thus Dag Hammarskjold, second secretary-general of the United Nations, wrote in his spiritual diary, shortly before he was killed on a mission trying to bring peace to the Congo.

Another conscious server of the greatest stature, and nearly unknown in the western world for the magnificence of his inner dimensions was the late U Thant, the third UN secretary-general. U Thant, who skillfully and quietly guided the UN through the most difficult decade of its existence, was a devout, practicing Buddhist, who deeply searched himself in meditative practices native to him every morning before he went to the secretary-general's office on the thirty-eighth floor of the UN.

The energy of synthesis focusing in the United Nations, seeking to make its harmonizing, relating, integrating, goal-oriented impact, now has another champion. He is Sri Chinmoy, a dear friend, a colleague and teacher, who in addition to his offerings to young people seeking the golden door of freedom, has accepted a responsibility in relation to the United Nations. As director of the UN Meditation Group, he is undertaking to construct a consciously cooperating meditative network throughout the UN of persons training themselves to be better representatives of the soul of the UN and better receivers to manifest and dispense the energies of human unification. Sri Chinmoy conducts meditations in the United Nations, attended by delegates, staff, and representatives of non-governmental organizations, and once a month gives a lecture in the Dag Hammarskjold auditorium on some aspect of the significance and subjective life of the UN.

A quote or two from lectures by Sri Chinmoy on the United Nations will provide something of the flavor of his presence there:

A spiritual goal for the United Nations is practical. Without the least possible hesitation I venture to say that it's highly practical. It is not only

3. D. Hammarskjold, *Markings* (New York: Knopf, 1964), pp. 155, 159.

practical, but also practicable: something more, it is inevitable. We have to know what the spiritual goal for the United Nations is. Its goal is to become ultimately the savior of the world's imperfection, the liberator of the world's destruction and the fulfiller of the world's aspiration. My heart tells me that the United Nations has a divine ideal. My soul tells me that this ideal is going to be transformed into reality. Soulful concern is the essence of the United Nations ideal. Truthful patience is the substance of the United Nations ideal. Supernal fulfillment will be the essence of the United Nations reality. Today's United Nations offers hopeful and soulful advice to mankind. Today's United Nations feels truth and light in its loving heart. Tomorrow's United Nations will offer fruitful and fulfilling peace to mankind. Today's United Nations feels truth and light in its loving heart. Tomorrow's United Nations will manifest truth and light in its all-embracing soul.⁴

This meditation is not only for the United Nations but for the world at large. This meditation is for the God-lover and the man-lover. If we really love God, and if we really love mankind and consciously believe that we are responsible for mankind, then we feel that our aspiration and dedication to the soul of the United Nations and our Inner Pilot is of paramount importance. Please feel that it is your own aspiration that will expedite the vision for the United Nations. And when the vision is transformed into reality, the Inner Pilot will know our contribution whether or not the world ever recognizes it. . . .⁵

The little people and the big people are important in implementing the United Nations' vision. Every year the UN receives hundreds of thousands of applications from highly qualified people that it cannot possibly employ who are responding to the magnetic pull of the new vision of global mankind. Two incidents related to UN peacekeeping also show the instinctive (or if you like, intuitional) response to the meaning of the United Nations. The first occurred at the transfer of British troops on Cyprus to UN command. There was some concern among the officers as to how this would be received by the Tommies. After review the new commander asked, "Any questions?" He became apprehensive when one soldier said, "Yes, sir." But the question was, "When do we get the blue UN berets?" The same unit petitioned for, and received permission to wear them back to the United Kingdom for one final review before they were retransferred.

Recently, when a terrible earthquake struck Peru and disaster units were needed, Sweden asked UN permission to send a contingent it had trained for UN peacekeeping missions, which wished to serve in disaster relief as a UN unit. Permission was granted.

4. Sri Chinmoy, *The Garland of Nation-Souls* (New York: Lighthouse Press, 1972), p. 27.

5. Sri Chinmoy, "Invitation to Meditation", *Meditation at the United Nations Bulletin* (May 27, 1974).

Another aspect of UN life is almost totally unknown. The UN charter, which begins with the words, "We the Peoples . . ." not governments, has made room for direct citizen participation in its affairs. Qualified NGOs (non-governmental organizations) may become consultants to UN agencies and to the Economic and Social Council, and may make statements or circulate their views to some UN bodies. Several hundred citizen groups have accepted this opportunity, and have a direct and important impact on what the UN is doing. Cooperating also, is an informal "mankind underground" of delegates and secretarial personnel who are wholly dedicated to the construction of the City of Man.

We are watching in the United Nations the vivification of a new center and the manifestation of a new energy. We are participating in the organization of a new entity: *Mankind*. This is not only a hopeful prospect. It is in the process of occurring.

The integration of the human individual in his physical, emotional, mental and trans-personal aspects, and world unification are not separate processes. They interact and reinforce each other. The soul of man and the soul of mankind are not separate. Marked in the substance of each one of us are the gashes and scars which afflict mankind, resulting from discrimination, tyranny, injustice, inequity. We will always be incomplete until the song celestial of World Man is finally heard. The individual human bells will not ring perfection by themselves. If you seek deeper or higher self-linkages, if you undertake meditative or spiritual practices as part of your personal life, you will soon find that the partitions in the "farther reaches of human nature" are thin, and discover your essential identity with all persons and with Mankind.

If, on the other hand, you decide to act on behalf of human need and in support of planetary unification—the next step for mankind—you will also discover your relationship to the whole: if you give your life to selfless service to mankind, you will find that you yourself are also on a path of self-transcendence and spiritual growth, because you will find the necessity for drawing on ever deeper aspects of yourself. The two approaches, vertical and horizontal, to our Soul and to Mankind, are not at all separate paths. No matter which one you take initially, they will soon converge and eventually coincide. That they were ever separate was an illusion. They were one path from the beginning. Furthermore, every individual, no matter how obscure he may feel, and regardless of along which arm of the cross he enters into the process, will, as he grows and works, contribute far more than he may realize to the process.

There is something every person can do, beginning from where he or she presently is, by following the wonderful old aphorism of "Advance without, retreat within."

You will begin to act out your responsibility not from duty, not from zealotry or even the search for martyrdom, but out of the spontaneous integrality of your own nature, which is Humanity. So, tune up and tune in, and assist in the interception, reception, circulation and re-radiation of the newly arriving energies of human unification. Your resonant achievement will be Mankind's blessing.

THE NEW CREATION

*It is the aeon of Truth's advent;
On evolution's playfield Mother Earth
With the new consciousness' miraculous descent
To the golden creation is giving birth.
Quivering with birth-pangs still alive,
Violently shaken in all her roots,
Burning in aspiration forward to drive
While yet a prisoner of ancient moods,
Earth is the battlefield of giant might.
To conquer and abolish perversion's tyrant-power,
Love, victorious, assails the Lords of Night.
The future has come and the past's dying hour.
Knowing their term ends, the dark world-lashes
A final show enact; demons, desperate, rear:
Late flickerings of night-fire are soon ashes
For now the reign of dawn is here.
The morning sky enamoured of lustre is ablaze
With the sun's ascent, aureate in rose and gold.
Clouds fade, dissolved is their misty haze;
A glory of sunrays, spears shooting bold
Pierce the ether; the grey walls crumble:
Day has entered its rapturous curve.
Greatness is now born, though still mumble
Waves below, tossing foam and surf—
Exhausted oceans close to the shore—
Journeying since ages unnumbered from far
Continents, driven by the titan-hammer Thor
Smiting their waters' vast surface-bar.
Thunder and lightnings' once mighty reign
Now spent, decays, doomed to perish.
Love has arrived to heal all pain;
Wisdom has come his kingdom to cherish,
The earth as monarch to rule with Love,
A queen at his side, ministered by Force,*

*Throned under bliss' baldachin above.
The race has begun of the deathless White Horse.*

*All this, as yet the Tree of Truth's young seed
Sown in the bosom of Mother Earth,
Must heavenward grow, the sun to meet,
Reach its parent sky while rooted deep in earth,
Nourished with waters from the fertile soil,
Transformed by the alchemic miracle of truth
That distills from the crude dark oil
The crystalline life-elixir of eternal youth.
Light-showers sprinkle in raindrops,
A dancing raiment of transparent hue
Descending from above our mountain tops,
For its growth, the embedded seed to woo.
Herald-birds chant, a new age has dawned;
A prophecy is their vibrant hymnal-song
Of release from the iron cage, proclaimed
In happy anthem-resonance with the psychic gong.
Seemingly unconnected over the world,
Everywhere it forms, it grows, it is,
A subtle network secretly unfurled,
Reaching out impatient to dismiss
The old. Evolution, advancing, has quantum leapt;
It takes the next stride at invincible pace
Beyond the dwarf-mind in animal-nature wrapt,
Tearing the veil that hides man's godhead-face.
Today is the vague silhouette of tomorrow's features.
Our century is the first to throng with events,
Before unimaginable for the human creature,
Unable to fit within the era's wide fence.
Visible signs abound worldwide
Of life's fabulous mutation and breakthrough
Into the ever expanding and rising tide
Of the fourth dimension, vast, right, true.
Dawn's children assemble for the march
Into the future; Tomorrow's truth-ship
Takes them on their way, a speeding fire-torch
Embarking on the great adventurous trip
For the unknown noon of everlasting day.
The yearning pioneers of a true humankind,*

*Following the upward course of the inner serpent way,
Sail to the golden galaxy of the supermind—
Guided by beacon-stars from the sapphire lands.
Caught in the sun-mirror of the mind of light
Are the luminous winds, the lightning-hands
That drive it upward, height upon solar height.
There the gnostonauts hunt the golden sun,
Capture it as prey to feed earth's heart,
Fulfilling the Many with the All and One.
Heaven descends, earth becomes of it a part,
Lured into the sailors' far-flung net
Woven from flames of aspiration-fire.
Birthright of the world, the fateful thread
Is knotted forever by the mutual desire
Of man for God and God for man,
With Nature third in the triumvirate
That has played the world-game since it began
Its dance of Oneness in the Many's heart.
A beginning—reborn eternally new
In the continual festival of the cosmic queen—
That has ever been, That will ever be, immortal and true,
Alone in things visible and those unseen.
Truth immanent and Truth fourfold, Truth beyond,
Truth absolute, Supreme Truth new-born on earth.
Earth will be released from the iron bond
Of darkness' abysm, subconscious hells or worse,
From ignorance with falsehood as mirror and wing,
From death, life's ever haunting ghost,
From suffering's bitter sap and poisonous sting,
To openly host a still secret guest.*

*The cry arose from the bosom of our globe,
A silent burning question, yet a mighty cry.
Passionate flamed the comet-star hope
Far-winged into the vastness of night; a sigh
Too profound and inly felt to be in vain,
Not to be answered by the occult, twofold Supreme
Who tills the field of which the universe is but a grain,
Spills as seed into the soil of sleep the cosmic dream.
The time has come for earth's destiny to unveil its face
Of a new apocalypse in evolution's endless toil.*

*The messenger-bird of emerald life and the mental race,
Of the clay mother with her rich-coloured soil,
Spiralling flew to the soul of the Infinite,
Soared to the throne of the ever-beyond,
Drawn like a moth to the original light.
Silence' immobile heart to its want awakened,
Stirred, from within resounding
In crescendo-resonance with our universe.
The invisible bells of fate began to ring
In the perfect rhythm of a new cosmic birth.*

*Invoked is the Spirit of the glorious truth-age,
Evoked the epiphany's victorious descent,
Turned the book of destiny to the next and unknown page
To be inscribed with the fiery runes of the soul's ascent,
Written with the new creation's flaming ink.
It is the happy end to our war-tale's gaudy gloom
In crimson Love's mystic marriage with Psyche's pink:
A solar union that leaves forever the ego's walls of doom,
Released from dark-hued prison into rainbow worlds of transparent peace—
Life's liberation from division's agony, the healing of illusion's farce.
These by an almighty Love's mutation shall be forced to cease.
Then will be freed the cosmic man, whose vast embrace contains the stars;
Created the living Icon, thrilling with ecstasies of sevenfold birth;
Incarnated the fire-child, crowned with the lotus of limitless Wisdom,
Who soars on Silence' diamond wings beyond the gods of the universe
And, freely wandering, explores being and becoming's paradise and kingdom,
Ever rapt in play with infinity, mirrored in crystal suns—
Sunballs rolling through eternity's corridors of space and time.
Beauty's domes will tower, bright-hued marvels of architectural plans,
Domes echoing the epic music of the spheres in multi-dimensioned rhyme,
Of life that is divine, of man the conscious child of God.*

Alexander Brodt

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THE THIRD AMERICAN FRONTIER: THE EVOLUTION OF CONSCIOUSNESS AND TRANSFORMATION OF SOCIETY

Duane S. Elgin

The Outer World and Inner Condition

The outer world reflects our inner condition. External crises—inflation, environmental degradation, unemployment, rising crime rates, urban decay—reveal profound internal crises. For example, our increasing ability to control the environment demands a commensurate increase in human responsibility and wisdom to ensure that we exercise our power wisely. Excessive levels of environmental deterioration, in turn, reveal an inner lack of responsibility and maturity as we literally destroy our own "home". The outer and inner solutions, then, become inextricably intertwined. This is an unfamiliar notion in America.

Although we are well acquainted with extensive and rapid external change—new forms of transportation, new communications technologies, new weapons systems, an increasingly bewildering variety of consumer goods, new policies to cope with it all—we are not so accustomed to the idea and significance of internal change. Consequently, while our power to control nature through our technologies has grown enormously over the last half century, we have not grown commensurately as individuals. We have virtually instantaneous communication with any part of the world and yet fail to communicate openly and honestly with persons closest to us. We have learned to harness the atom and yet threaten ourselves with nuclear destruction. We collectively abhor the pollution of our environment and individually acquiesce in and contribute to its ruin. We have created a technological society to provide us with unprecedented levels of material affluence; yet, we are prey, through stress-related "dis-ease", to destruction by the very urban-industrial system that we created to serve us. In short, as Dennis Gabor has so aptly stated, "Till now man has been up against nature; from now on he will be up against his own nature."

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When we had limited mastery of our environment, we could not do much harm. Today with our power enormously magnified, we can do irreparable damage. Unless we expand our inner learning to match our technological learning, we are almost certain to exercise our magnified power unwisely. Indeed, if we are to become the creative architects of our own destiny, our interior human growth and maturation must be more than commensurate with the enormous exterior changes that have occurred over the past century. This degree of inner growth is feasible, since we currently use only a small fraction of the range and depth of our full human capacities.

But how and in what directions must we grow? Our industrial state has immense drive, but little direction; we have a marvelous capacity for getting there, but no idea of where we are going. In our rationalized and segmented society, it becomes increasingly difficult to sort out the durable from the ephemeral, the significant from the trivial. Our knowledge-based society generates staggering quantities of information that may, for a time, lull us with a false sense of understanding—yet, many sense we are not provided with a satisfying penetration into the inner meaning of things. Equally distressing, the guiding values of industrial society—material progress, competition, rationalism, aggressive individualism—no longer so thoroughly enchant us. Largely attained, our industrial goals of efficiency and expanding production conspire to frustrate desirable aims such as enriched work, conserved resources, and enhanced living environments. In sum, we are compelled to rethink what life means and where we aspire to go.

The Third American Frontier

Our first frontier was the fabled open land of the West. The challenge was to settle a rich but harsh environment. As the first frontier closed at the turn of this century, a second frontier—the industrial or technological—opened to replace it. The challenge became one of exploiting the environment we had mastered to gain an unprecedented level of material affluence. With exceptions, that challenge has now been met. Today, with increasing concern for the environment and with a growing realization of the limits of world resources, we are recognizing—symbolically, at least—the closing of this second great frontier.

Even now, a new, Third Frontier is opening. It is a frontier of social and individual change whose exact dimensions are still unclear but whose rough outline is discernible. It is the frontier of the person exploring, in community with others, the next stage of the human possibility. Challenges along our past frontiers were external, in the first case mastery of the land and in the second manipulation of technology. The challenge of the Third Frontier is primarily an internal one—the challenge of realizing our still substantially untapped human potentials.

Accepting the challenge of the Third Frontier neither denies nor turns away from the earlier challenges met and mastered. We did not “un-settle” the West when we pressed to open the technological frontier. Likewise, we need to build upon our technological achievement as we progress into the next American frontier.

For some, the inward-turning implied by this new American frontier could be seen as escapism. A growing interest in, for example, spiritual experience, parapsychological phenom-

ena, and enhanced awareness could be dismissed as merely a return to the superstitions of a less scientific and more gullible age. Likewise, the increasing interest in intuitive and emotional processes might be interpreted as an abandonment of the rationalism that undergirds science, the primary engine of change in our technological era. Like all new frontiers, then, there is both hope and despair as different people look upon its possibilities.

What appears to be the breaking down of civilization may well be simply the breaking-up of old forms of life itself (not an eruption of madness or self-destruction), a process that is entirely natural and inevitable. Perhaps we are in the tumultuous but exciting close of a centuries old kind of consciousness—a few of us like theologians of the medieval church encountering the unstoppable energy of the Renaissance. What we must avoid is the paranoia of history's "true believers," who have always misinterpreted a natural, evolutionary transformation of consciousness as being the violent conclusion of all history. [Oates, 1972*]

If we are to achieve the transition into this Third Frontier and fruitfully explore its possibilities, two closely related ethics must emerge. First is a self-realization ethic, which asserts that each person's proper goal is the evolutionary development of his fullest human potential. Accordingly, this ethic insists that social institutions provide an environment supportive of that self-realization. Second, we must develop an ecological ethic which accepts our earth as limited, recognizes the underlying unity of the human race, and perceives man as an integral part of the natural environment.

These two ethics of the Third Frontier—the self-realization ethic and the ecological ethic—are two sides of a single coin. Orchestrated with one another, they leave room both for cooperation and for wholesome competition, for sociality and individuality. Indeed, each serves as a corrective for possible excesses or misapplications of the other.

Roots of the Third Frontier

The foregoing discussion implies a world view strikingly different from that in which we have been immersed for the last half century in living along the second, or industrial, frontier. Consequently, we must look deeper—to the very roots of what it means to be human—if we are to perceive the basic rationale of this Third Frontier. Self-awareness is possibly the most fundamental characteristic of the human species. We are all familiar with levels of awareness—deep sleep, dreaming, normally awake, keenly aware as in moments of creativity, and so on. By extrapolation, the claims of mystics, artists, and others who insist there are many other and much higher dimensions of man's consciousness to be explored become plausible. As William James expressed it in *Varieties of Religious Experience*:

our normal waking consciousness, rational consciousness as we call it, is

*All references to this paper are appended in alphabetical order; the year indicates date of publication.

but one special type of consciousness, whilst all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different. We may go through life without suspecting their existence, but apply the requisite stimulus, and at a touch they are there in all their completeness.

Metaphorically, it is as though we live and move in one small and cramped room, thinking that this room is our home in its entirety. Yet, if we were only to become aware, we would find that our house is a mansion with many magnificent rooms.

Historically, in our highly rational, technological society, such suggestions of enlarged human possibilities were given scant credence or attention. More recently, with the soil of the second frontier providing nurture for seeds of the Third Frontier, science has discovered that there are physical correlates to different states of consciousness. Scientific measurements of muscle tension, rapid eye movements, brain wave activity, and electrical fields within and around the body have begun to make legitimate the systematic exploration of inner space. Paradoxically, then, the tools of science are rapidly confirming the existence of higher states of consciousness that the scientific world view has either denied or largely ignored.

In the context of this Third Frontier, then, the purposeful evolution of self-awareness in community with others becomes a central motive of existence. This is a motivation, however, to which it is difficult to give expression in our society. First, for most of us, life goes on as always—largely a matter of habit, with our perceptions and knowledge unconsciously screened by countless psychological and cultural filters. Although the significance of human history may lie in the unfolding of the human psyche, we brush this possibility aside by the consensus of our collective “ignore-ance”. Second, although many methods exist for enhancing self-awareness—meditation, biofeedback, psychotherapy—people who successfully employ these methods, and thereby serve as models, seldom enter the daily life-worlds of most people. Although we may find little understanding and support from our larger culture, there is yet reason for not turning hastily from this challenging frontier. Other explorers have gone before us. We can gather strength and insight from those persons—many from other cultures—who have explored man’s internal frontiers as fully as our society has probed external, technological ones. Those who have penetrated the veil we place before the human possibility have found dimensions as vast and, to us, as incomprehensible as our technological marvels would have seemed to those who lived many centuries ago. Indeed, the contemporary survival of man may well depend upon the synthesis of these two great historical streams of human growth and learning—the one external and predominantly objective, the other internal and predominantly subjective.

The Material Dimension of the Third Frontier

The success of the industrial frontier is a major step in social evolution. This advance has freed many from the struggle for subsistence—a struggle that, historically, has tightly bound the expansion of awareness. Yet, for many, the evolution of individual consciousness

still remains a dormant possibility. Instead of using our recently acquired freedom from the demands of the exterior aspects of life to explore interior growth, we have become slaves to a new form of material "necessity". We have traded the age-old fight against real material scarcity for a new struggle—an endless cycle of keeping up with the proverbial Joneses, as limitless "psychological scarcity" expands material wants indefinitely. Behaving much like a child in a candy store with his first allowance, or an adolescent with his first adventures into sex, or a young adult with his first experiences with alcohol or drugs—we have "over-dosed" on the material possibility of the postwar years. Each form of overconsumption has its peculiar penalties—a stomach ache, an unwanted child, a hangover. The desperate attempt to buy happiness, likewise, has its consequences. By defining our identities through the material goods that we consume, we limit and distort our human potentials—we are possessed by our possessions, consumed by that which we consume. For an increasing number of people, this level and this style of consumption are accompanied by an inner poverty and alienation. Thus "voluntary simplicity", a major theme of social change along the Third Frontier, becomes manifest.

Richard Gregg wrote that voluntary simplicity, "the deliberate organization of life with the intention of achieving outward simplicity by discarding possessions and activities irrelevant to the main purpose", would allow internal exploration. Although the degree of simplification is a matter for each individual to settle for himself, it does imply a partial restraint in one aspect of life to secure greater abundance in another. An equitable redistribution of wealth would seem a precondition for such frugality to be voluntarily assumed by a substantial proportion of the population—particularly the poor. Nonetheless, economic necessity and evolutionary potential coincide to make the voluntary simplicity of the Third Frontier practical. Our nation confronts increasingly severe ecological constraints, the impact of world famine, chronic resource and energy shortages, and a widening gap between rich and poor nations. In this age of "new scarcity", we are indeed compelled to live more frugally. Thus, rather than a contradiction to the industrial frontier, the exterior simplicity and the interior richness of the Third Frontier are rational responses to a pressing situation.

The Individual and the Third Frontier

A basic thesis of the Third Frontier is that moving harmoniously with the gentle evolutionary imperative of self-realization is, in its own right, a goal worthy of human aspiration. Nonetheless, we Americans are a pragmatic people and, as such, want to know what good, beyond the merit of its social consequences, this process has for us, as individuals. Does inner growth have any practical connection with the immediate world around us? To be sure, the evolution of one's consciousness does have significant applications. Recall our starting point—that the outer world reflects our inner condition. If true, then external problems should point toward internal dimensions that lack development.

Assuming we have basic social problems that are amenable to some degree of remedy through the evolution of our awareness, let us explore just three characteristics of our contemporary society.

Stressful Rates of Social Change—Massive and rapid changes confront virtually every person and sector of our society. Ironically, change seems to be the only constant of our time. We see it all around and within: in changing styles of marriage and family; in the rapid obsolescence and equally rapid emergence of work roles; in biomedical advances that temptingly promise to make virtually any part of the body replacable or any adverse form of behavior modifiable; in culture shock as our sophisticated communication technologies confront us with an unprecedented variety and quantity of information concerning subcultures from within and contrasting cultures from abroad. Many people are stressed by this avalanche of change, which seems to have too little underlying purpose or meaning to make it worth enduring.

Stressful Living Environments—Another problem of our advanced industrial society is the increasing prevalence and intensity of "environmental stressors": noise pollution, air pollution, traffic congestion, overcrowding, lack of access to the natural environment, high levels of superficial interaction with many people. Stressors such as these can contribute to mental and physical disease by activating latent disease potentials within the human organism.

Stressful Decision Making Environments—We have aggregated comprehensible and substantially independent smaller systems (localized transportation and communication networks, local governments responding to small populations, and the like) into mammoth, highly interdependent, and oftentimes incomprehensibly complex supersystems. To become an able decision maker within such complex supersystems requires the processing of ever greater amounts of information, faster learning and relearning of new skills, and increasing creativity to deal with novel situations.

Now, assuming that we have substantial unused potentials, let me again argue through William James, who, in a letter to W. Lutoslawski, expressed his views on this matter:

I have no doubt whatever that most people live, whether physically, intellectually, or morally, in a very restricted circle of their potential being. They make use of a very small portion of their possible consciousness, and of their soul's resources in general, much like a man who, out of his whole bodily organism, should get into a habit of using and moving only his little finger. . . . We all have reservoirs of life to draw upon, of which we do not dream.

More specifically, Harman (1967) assessed a range of human possibilities and cataloged those in which our underdevelopment seems most apparent; they include:

- Perceptual and emotional sensitivity/awareness
- Empathic communication
- Creative imagination

- Awareness and control of our physiological processes
- Capacity to cope with internal and external stress.

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Given these areas of underdevelopment, what practical consequences might accrue from their development? Let us consider four of many possible examples.

The Reduction of Physical and Mental Illness—"According to medical specialists, perhaps as much as 80% of human problems involve psychosomatic disease, either totally or as a contributing factor" (Green and Green, 1971). Recent research (Holmes and Masuda, 1970), which indicates that a substantial portion of our physical and mental disease is activated by environmental stressors such as divorce, death in the family, loss of job, and the like, supports the significance of the psychosomatic component in disease. Nonetheless, this is a topic largely neglected by the medical community. As an illustration, the 1972 edition of the *Cumulated Index Medicus*, which lists journal articles on medicine, has 6,595 pages, with three columns per page; however, slightly less than one column catalogs journal articles on "Psychosomatic Medicine", and nearly half of those listings are in foreign language publications. This not-so-benign neglect of the nonphysical sources of disease is surely contributing to our soaring medical costs and failing health.

One effective way of reducing disease is to provide people with less stressful ways of relating to their environment. "It seems reasonable to assume that if we can get physiologically sick from responding psychologically to stress in some inappropriate way, we can perhaps get well by learning to control the psychological response" (Green et al., 1973). This does *not* mean we should not attempt to remove environmental stressors, nor does it mean we should ignore the health improvements that could come from dealing more effectively with stress.

Among the "consciousness processes" that can help a person to constructively alter his response to stress are psychotherapy, drugs, meditation, biofeedback, encounter groups, and hypnosis (McQuade and Aikman, 1974). Such processes allow a person to focus as much on the generation of health as on the elimination of disease.

The Improvement of Decision Making—The decision making environment in our society is becoming increasingly difficult. The interdependence of systems makes problems both broader—at times approaching a global scale—and more complex; the amount of information that must be brought to bear upon most issues seems to be increasing exponentially; and the rapidity of societal change means that fateful decisions must be made more frequently. The consequence of such forces is that decision making is becoming more stressful. Research suggests that under such circumstances people typically reduce their information inputs, resort to simple decision-rules, and react more instinctively (Streufert, 1972). This decision making mode may be dangerously counterproductive in our interdependent and vulnerable society, which requires the highest quality of decision making—whether in government, business, or day to day personal life.

An example of the utility of consciousness research can be found in the decision making processes of successful corporate executives. Recent research (Mihalasky, 1967, 1972) suggests that the "gut feel" and "intuitive hunch" so often used by top executives of suc-

cessful corporations may well be a form of extrasensory perception. F. I. Shartle, in *Executive Performance and Leadership* (1956), states:

Most decisions are made on the basis of incomplete evidence. Facts may not be available, or there may not be sufficient time or staff assistance to uncover or assemble them. Thus, a good executive must be a good guesser. He must piece together the fragments of the facts he has, and act accordingly. Some executives have reputations of being uncanny in making the right decision without apparent evidence.

Research on extrasensory perception, such as that done by Targ and Puthoff (1972, 1974), may be able to enhance this "good guessing" ability and thereby improve the quality of decision making in an imperfect information environment.

The Increase of Creativity—In this time of rapid societal change, the fullest measure of individual and group creativity would seem to be a requisite for much of our work in business, politics, education, and planning. But what is the nature of the creative state of consciousness? Rollo May (1973) offers us a description:

[The creative state of consciousness] is most clearly illustrated when one gets a sudden insight into a problem—abruptly, seemingly from nowhere, pops up an answer for which one has struggled in vain for days. Sometimes such insights come in dreams, or at moments of reverie when one is thinking about something else. . . . As all students of creativity make clear, this level of consciousness is present in all creative work.

Many of the geniuses of our era have described the states of reverie in which creative solutions and inspirations have come to them. For example, it was during such a reverie, while sitting before a fire, that Kekule had a vision of a snake eating its own tail and thereby perceived the atomic bonding of the benzene ring. Such creative potentials seem to be a part of every person's intuitive being. Yet, this is an aspect of the human possibility that often goes unacknowledged and untapped—perhaps because there have been so few processes with which to understand and use this component of our being. Now, however, sophisticated processes are being used to explore creative states of consciousness and to define means whereby creativity can be substantially enhanced (Green and Green, 1971; Houston, 1975; Krippner and Meacham, 1968).

The Expansion and Improvement of Education—Virtually none of our educational processes seem directed to the end of self-knowledge. Yet, the very word "education"—which derives from *educare* and means "to lead out", presumably that which is within—suggests that the process should include enhanced understanding about one's inner self. Such internal learning can be used in externally constructive ways.

One example of a self-knowledge process that can have utility is meditation. Extensive research in recent years on the psychophysical correlates of Transcendental Meditation

provides a scientific basis from which we can generalize, I think, about the utility of meditative processes in general. A few of the practical by-products of meditation reported by Wallace (1974) include decreased anxiety, stability of attention, improved interpersonal relations, a tendency to view man as basically good, and increased learning ability. These are an impressive collection of capacities—each of which can contribute to both individual and social well-being.

Another example of a significant educational process is that of "suggestology". It was developed by the Bulgarian psychologist Georgi Lozanov (1971) and combines mental relaxation with heightened suggestion. With it he reports teaching students to assimilate and integrate two to three times more information than with traditional learning processes. Although health improvement is not included in his approach, students sometimes experience the spontaneous remission of tension-related or psychosomatic disorders. Clearly, education that respects the inner dimension of learning can potentially magnify many times its social utility.

Conclusion

We have explored only a few regions of the vast landscape of human possibility that constitutes the Third American Frontier. I am not overly optimistic that this frontier will be realized. Further, the skepticism and disillusion that cause the Third Frontier and its gentle evolutionary imperative to be viewed as another noble pipe dream may prove fatal. We may discover our humanity only too late as we are carried off "on a shrug of eternity". Indeed, self-discovery—if it happens—will surely be born out of the very trauma that could engender self-destruction. Simone de Beauvoir has written, "Life is occupied in both perpetuating itself and in surpassing itself; if all it does is maintain itself, then living is only not dying." With wisdom and frugality, we now have the means to maintain ourselves. It remains to be seen whether we can surpass ourselves—both individually and collectively—in the emergent challenge of America's Third Frontier.

References

- Green, A. M., E. Green, and E. D. Walters, "Psychophysiological Training for Creativity" (Paper presented by Alyce M. Green to the American Psychological Association, Washington, D.C., 1971).
- Green, A. M., E. E. Green, and E. D. Walters, "Brainwave Training, Imagery, Creativity and Integrative Experiences" (Research paper, The Menninger Foundation, Topeka, Kansas (April 5, 1973).
- Green E., and A. Green, "How to Make Use of the Field of Mind Theory", in **Varieties of Healing Experience** (Los Altos, California: Academy of Parapsychology and Medicine, 1971).
- Gregg, R., "Voluntary Simplicity", **MANAS** (September 4 and 11, 1974).
- Harman, W. W., "Belief Systems, Scientific Findings and Educational Policy" (Research paper, Stanford Research Institute, Menlo Park, California, 1967).
- Holmes, T., and M. Masuda, "Life Change and Illness Susceptibility" (Paper presented at the annual meeting of the American Association for the Advance of Science, Chicago, Illinois, December 26-30, 1970).
- Houston, J., "Putting the First Man on Earth", **Saturday Review** (February 22, 1975).

- James, W., **Varieties of Religious Experience** (New York: Macmillan, 1961).
- James, W., "Letter to W. Lutoslawski", in **William James on Psychical Research**, G. Murphy, ed. (New York: Viking Press 1969).
- Krippner, S., and W. Meacham, "Consciousness and the Creative Process", **The Gifted Child Quarterly** (Autumn 1968).
- Lozanov, G., **Suggestology** (Sofia: n.p., 1971).
- May, R., **Man's Search for Himself** (New York: Dell, 1973).
- McQuade, W., and A. Aikman, **Stress** (New York: E. P. Dutton, 1974).
- Mihalasky, J., "Extrasensory Perception in Management", **Advanced Management Journal** (July 1967).
- Mihalasky, J., "The Role of Precognition in Risk Analysis" (From **Decision and Risk Analysis**, presented at the sixth, triennial symposium, Engineering Economy Division, American Society for Engineering Education, Annapolis, Maryland, June 19-20, 1972).
- Oates, J.C., "New Heaven and Earth", **Saturday Review** (November 4, 1972).
- Salk, J., **Man Unfolding** (New York: Harper and Row, 1972).
- Shartle, F. I., **Executive Performance and Leadership** (New Jersey: Prentice-Hall, 1956).
- Streufert, S., "Success and Response Rate in Complex Decision Making", **Journal of Experimental Social Psychology** 8, no. 5 (1972).
- Targ, R., "Learning Clairvoyance and Precognition with an Extrasensory Perception Teaching Machine", **Parapsychological Review** (July 1972).
- Targ, R., and H. Puthoff, "Information Transmission under Conditions of Sensory Shielding", **Nature** (October 18, 1974).
- Wallace, R., **Neurophysiology of Enlightenment: Scientific Research on Transcendental Meditation** (New York: MIU Press, 1974).

THE SCIENCE OF NATION-BUILDING

G. S. Gokhale

The work of nation-building—that is to say the work of building in the mind and life of the people who constitute a nation a consciousness and force which will so progressively manifest in their collective action and influence that the soul of the nation shall shine forth through their behaviour and works and demonstrate to mankind an exemplary way of life—can be accomplished by the combined working of five great and independent powers. These powers may be termed: (1) *raj-shakti*, (2) *vyavahara-shakti*, (3) *lok-shakti*, (4) *prakritic-shakti*, and (5) *atma-shakti*.

Raj-shakti, the power of government, is principally a physical power which in this curve of materialism is trying to become an all-pervading force. The true nature of government is, however, that it forms the ego of the nation. According to the ancient *shastra*, scripture, the work of the ego consists in giving a shape to the personality at a certain stage of progress. It can do this by properly controlling the interests and desires of the collectivity and its various sections, and by maintaining the unity of the nation's physical frame and structure. The method of the ego

consists of outward control, for ego is a machinery that works by rules and regulations. It can never have full and innate control over the vital and mental powers of the true person.

This nature of the ego brings a corresponding limitation to the office and utility of government in the work of nation-building. The government must serve, control and try to harmonise the play of sectional interests and desires and yoke the nation to the discipline of a united life. It must concern itself with the equal welfare of all and should not allow the few or the many to exploit the all. Coercive or destructive power is given to the state for this very purpose. The government as a machinery does not, however, possess the inner formative powers of spirit that accomplish true construction. For this purpose the government has to learn to coordinate its own action with the action of those powers which can fashion or discipline the inner mechanism that builds a nation. To the extent that a government can successfully accomplish this task, which is difficult for its rigid postures to accommodate, and to the degree of such accommodation in various branches of national life, we can measure the efficiency of that government in terms of its contribution to the work of building a great nation.

Vyavahara-shakti, the power of vital efficiency, reflects the willpower of the people and their knowledge, skill and energy in

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action. Aided by a proper organisation, this power can develop its own dynamism independent of the state-machine. Various factors such as capital and labour, technology and management, propoganda and research, contribute to the manifold development of this power in the nation. Modern government, much of whose activity is concerned with economics, is becoming zealously interested in the development and control of this vyavahara-shakti. It does not, however, possess the keys of its operation. The technique or craft which can develop the fruitfulness of this power consists of skill, discrimination, and a pliable order based on laws of enlightened exchange and productive communication. It is in developing this power that an independent and powerful trade-union movement can contribute greatly if it can transform its bargaining mechanism into a vast and equipoised energy of progressive dynamism.

By *lok-shakti* we do not mean the number of people or their mobilisation for a particular surface action, such as for a vote or *morcha* or strike. The true lok-shakti is the deep power expressed in the formation of the peoples' mind, and it manifests itself through their character and everyday conduct. It is the result of education and culture and the development of various habits and tastes, in which art and literature can play a great role. The aims and ideals of the people, their traditions and system of values and philosophy of life, give a characteristic orientation to the formation and working of this great and deep power. Thought and religion are constantly busy maintaining or developing this power in the people; and the modern state with its various "isms" and philosophies of government is trying to infiltrate by surface attempts and by outward manipulation to touch and influence the nature of this formative power of the nation.

Prakritic-shakti is the power of universal Nature. Geography and science give us some data about the physical aspects and potentialities of this power. History and sociology, if correctly read, give a scanty background of the mental framework it prepares. A time-vision born of a deep study of society and politics can give us a broad view of this power's future tendencies. The sankhya system of Indian philosophy has enumerated in a fine way the various elements that constitute prakritic-shakti. The application of this knowledge to the currents of world politics gives very interesting and useful results. The most recent of such studies has been made by Sri Aurobindo in his two books, *The Ideal of Human Unity* and *The Human Cycle*. The difficulties of modern government, arising mostly out of international politics and natural factors, can be met most successfully by working for the future on the basis of the study of the operation of this great power of universal Nature, and by following the disciplines born of such a study.

Atma-shakti is the universal soul-power of the *virat-purusha*, Cosmic Soul. This is the highest of all powers made available to mankind, but the most difficult to acquire and still more difficult to use. However, only it possesses the key to harmonise the operations of the other four powers and to reconcile the various contradictions of human tendencies, such as those of freedom and unity, equality and diversity. The ancient seers of India had successfully acquired and utilised the *chit*, consciousness-force, given by this power. That is how they brought about a unity of philosophy, religion and science in ancient India (a feat perhaps unequalled anywhere else in the world), prepared the inner mind of the race, and laid foundations for the cultural unity of India. This attempt had its repercus-

sions on India's literature and arts, but it could not then make any substantial progress in the social, economic, and political life.

It gave to the nation, however, a science of living which has continued to inspire the best minds of India in all ages and in all circumstances. India today needs very greatly this *atma-shakti* which alone can give a true content to her *swarajya*, self-rule, by enunciating the *swadharma*, self-law, for each of the different branches of national life, such as education, journalism, law, administration, labour, economics, and politics. An institute of studies in nation-building, working in the light of spiritual knowledge, appears to be a need in this connection. It would enable the laying of a sound foundation for the new phase of nation-building activity in India which is now promising to emerge like a second dawn in the long and chequered history of the nation.

Such, in brief, is a sketch of what can develop into a science of nation-building. It awaits its day of emergence amidst the great turmoil of our modern civilisation—a civilisation which is too busy pursuing ends about which it has very little knowledge. If India is not to repeat the oscillations between one or another "ism", each of which is only a fragment of Truth, or to become a carbon copy of some imperfect system of life tried by the West, and if she is, on the contrary, to give a lead to the world by herself establishing a more sound and healthy society in this ancient land, then she will do well to turn her attention to the original development of a science of nation-building and to engage herself in the *tapasya*, askesis, of *samashti yoga*, the yoga of the collectivity, that will be progressively revealed by the unfoldment of such a science.

FIELDS AND FORCES

Robert A. Smith, III

Each day slowly shapes our lives
as dripping water
shapes the stone.

Martin Buxbaum
Whispers in the Wind

The field both determines and is determined.

Harold Saxton Burr
The Fields of Life

Man models himself after Earth
Earth models itself after Heaven
Heaven models itself after Tao
And Tao models itself after Nature.

Lao Tzu

. . . every living organism is a system that radiates energy, thus creating a field around itself.

Victor M. Ingushin
"Biosplasma: The Fifth State of Matter?"

There is order everywhere, because all fields of activities are structured.

Dane Rudhyar
We Begin Again Together

[It is] the old Gnosis—the old way of knowing, which delighted in finding the sacred in the profane—and I will be treating it with no little respect, since I regard it as the essential and supreme impulse of the religious life.

Theodore Roszak
Where the Wasteland Ends

Using the construct of a "system in tension" for representing psychological needs definitely

presupposes a field theory. Conceptually, tension refers to the state of one system relative to the state of surrounding systems.

Kurt Lewin
Field Theory in Social Science

The gnostic consciousness is a consciousness in which all contradictions are cancelled or fused into each other in a higher light of seeing and being, in a unified self-knowledge and world-knowledge.

Sri Aurobindo
The Future Evolution of Man

It is the solar electromagnetic field that dictates the daily rhythms of the body. It controls all the internal bio-cyclic activities, including various brain rhythms. . . . The nervous system of Man, as with all animals, has developed not only within the limits of frequency patterns of sea-level solar radiation, but also within the natural delicate balancing among the various frequencies of this electromagnetic energy field.

George S. Robinson
Living in Outer Space

The late Harold Burr, Oliver Reiser, Albert Einstein, Kurt Lewin, Ludwig von Bertalanffy and Sri Aurobindo may be considered the major contributors to field theory. Julius Stulman's pregnant perception of "fields within fields" captures the gestalt of their respective views. Reiser provided us with a pregnant image of what he termed the cosmic

lens (the force of a supreme imagination) which, similar to other lenses, concentrated and focused waves of energy and thus organized fields of energy as guiding agencies.¹ Itzhak Bentov elaborates: "There is a strong coupling between these oscillations (earth's plasma and magnetic fields with the sun's energy signals)."² This could be termed "forcefields".³

But one might well ask at this point, what has all of this to do with humankind. I believe knowledge and understanding of fields and forces enables one to understand evolution and how changes and mutations occur. Some of this involves changes in how a person

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1. Oliver Leslie Reiser, **Cosmic Humanism and World Unity** (New York: Gordon and Breach, 1975).

2. Itzhak Bentov, "Micro-Motion of the Body as a Factor in the Development of the Nervous System" (Research paper, 1974).

3. John G. Bennett, "The Force Fields in an Organization: (1) The Dyad", **Systematics** (March 1974).

experiences himself or herself. For example, Riechman work with "body armor", Labanotation, Lowen's bioenergetic therapy, Rolfing, hatha yoga, Feldenkrais exercises, hara, and other dance forms such as ballet.⁴ Vibratory physics, and particularly electro-acoustics, are further extensions of sound in the evolution of human culture. Awareness of neuronal structuring within our brain coupled with biofeedback technology will provide for the harmonic coupling of neurons with planetary resonances.⁵ Kinaesthetic consciousness or awareness provides rhythmic or harmonic experience and constitutes a "rhythmic articulation of space and time".⁶ Nietzsche comes to our aid, "language can never adequately render the cosmic symbolism of music",⁷ for it is as Susanne Langer says, music "can be true to the life of feeling in a way that language cannot".⁸ For music helps define the cosmos as the Greeks defined it—order or organized. Music is an organized mixture of sounds and silences. It expresses the state of humans—the silence before birth, the mixture of silence and sound during life, and the silence of death.

Titus Burckhardt maintains that: "At every point of the cosmic tissue there is thus a warp

and a weft that cross one another, as indicated by the traditional symbolism of weaving, according to which the warp threads, vertically hung on the loom of primitive form, represent the essences of things—and so also qualities and essential forms—while the weft, which binds the warp together horizontally and at the same time covers it with its alternating waves."⁹ Humans are thus in the grandeur of the state of being placed at the intersection of the horizontal and vertical dimensions of reality rather than in the fixed center of a circle whose loss Yeats felt so keenly: "Things fall apart; the center cannot hold;/Mere anarchy is loosed upon the world."¹⁰ We are beginning to understand the hermetic meaning of "the horizonless circle without boundaries and limits [or] multiple centers [of] polytheism".¹¹ The centering image simply "cannot maintain stability in the current complexity of consciousness".¹²

Paul Ryan suggests that polymedia mapping enables us "to model the morphogenetic field that supports our life".¹³ Such media include videotape, holography, electric sensors, computers, biofeedback devices and psychodrama. But behind media always is "the human imagination as the supreme formative

4. Thomas Hanna, "Three Elements of Somatology", *Main Currents* 31, no. 3 (1975).

5. Willard Van De Bogart, "Harmonic Neurons", *World Union* 16, no. 1 (January 1975). See also Gordon Epperson, *The Musical Symbol* (Ames, Iowa: Iowa State University Press, 1967).

6. Algis Mickunas, "The Primacy of Movement", *Main Currents* 31, no. 1 (1974).

7. Friedrich Nietzsche, *The Philosophy of Nietzsche* (New York: Modern Library, 1954). See the section: "The Birth of Tragedy from the Spirit of Music".

8. Susanne K. Langer, *Philosophy in a New Key* (New York: Mentor Press, 1954).

9. Titus Burckhardt, "Cosmology and Modern Science" in Jacob Needleman, *The Sword of Gnosis* (Baltimore, Maryland: Penquim Books, 1974).

10. William Butler Yeats, "The Second Coming", *Collected Poems of W. B. Yeats* (New York: Macmillan, 1974).

11. David L. Miller, *The New Polytheism: Rebirth of the Gods and Goddesses* (New York: Harper & Row, 1974). See also James Hillman, *The Myth of Analysis* (Evanston, Illinois: Northwestern University Press, 1972).

12. Paul Ryan, *Cybernetics of the Sacred* (New York: Doubleday, 1974).

13. *Ibid.*

agent in the universe".¹⁴ Synaesthetic cinema and television may well signal the end of drama but, at the same time, the true beginning of psychodrama. As Gene Youngblood points out: "The videosphere is the noosphere transformed into a perceivable state."¹⁵ It is humanity's third eye or pineal gland reactivated and provides for synaesthetic synthesis of multiple perceptions, a mosaic simultaneity. Basically, television is an enabling force for experiencing or sensory perception—kinaesthesia.¹⁶ It enables the winds of all cultures to blow through you without blowing you away, to paraphrase Tagore. However, as Gene Gendlin points out: "Social and scientific entry upon the dimension of experiencing will require both experiencing and logical symbolization. Meaning is formed in the interaction of experiencing and something that functions symbolically. . . . The problem of the interaction between felt experiencing and symbolization is crucial . . . in both philosophy and in the behavioral sciences."¹⁷ Television, because of its movement of images comes close to meeting Gendlin's requirement for something that provides "interaction of experiencing and something that functions symbolically". In effect, television represents two

interlocking circles which symbolize both the labyrinth or mental prison and infinity or constant metamorphosis.¹⁸ As Keith Floyd would describe it, television is a holographic model of consciousness firing off patterns of neuronal energy inside our head which reflect a very broad spectrum of sensory, nonsensory, and extrasensory experiences.¹⁹

Wedding artists with modern communication technology—film, videotape, computer-generated images, television, and electronic moog synthesizers—produces the unprecedented ability to express and manipulate images and symbols of man's subjective consciousness. Synaesthetic videotape and cinema are non-linear because there is no external thematic plot, no story line nor even actors or dialogue but rather kinetic images.²⁰

Perhaps I should insert some caution at this point based upon the research of my friend, James B. Beal. Beal maintains that the earth's natural field is normally positive. He goes on to say that the extensive use of plastics inside our homes, places of work, automobiles, and airplanes can provide strong negative fields which augment fatigue, apathy, and even irritability. He questions whether we are not electrically polluting our environment. He proposes positive ion-generation of body cells as one solution.²¹

14. Lancelot Law Whyte, *The Universe Experience: A World View Beyond Science and Religion* (New York: Harper & Row, 1974). See also Marianne S. Andersen, and Louis M. Savary, *Passages: A Guide for Pilgrims of the Mind* (New York: Harper, 1972); and Manfred Halpern, "The Politics of Transformation", *Main Currents* 31, no. 5 (1975).

15. Gene Youngblood, *Expanded Cinema* (New York: Dutton, 1970). See also L. Clark Stevens, *EST: Electronic Social Transformation* (New York: Bantam Books, 1971).

16. *Ibid.*, Youngblood.

17. Eugene T. Gendlin, *Experiencing and the Creation of Meaning* (New York: The Free Press of Glencoe, 1962).

18. Enrico Garzilli, *Circles Without Center: Paths to the Discovery and Creation of Self in Modern Literature* (Cambridge: Harvard University Press, 1972). See also Robert A. Smith, III, "Gaps in the Circle", *General Systems* 19 (1974).

19. Keith Floyd, "Of Time and the Mind", *Fields Within Fields . . . Within Fields* (No. 10, 1974).

20. Richard P. Ingrasci, and Mel S. Kimura-Bucholtz, "Altering Consciousness: A New Dimension to Public Health", *Fields Within Fields . . . Within Fields* (Fall 1974).

21. James B. Beal, "How Fields Affect Us", *Fields Within Fields . . . Within Fields* (Summer 1974).

William A. Tiller, in discussing radiesthesia or sensitivity to radiations, informs us that radionics, the instrumental form of radiesthesia, is used to heal the general spectrum of ailments in humans as well as for prospecting for oils or minerals. He sees a relationship between the primary radionic wavefield, the vivaxis wavefield, and acupuncture points of the human body. Similar to Beal, he maintains that cellular or glandular breakdown occurs when the waveform is out of resonance; therefore, when energy "having the normal or healthy waveform of the gland is pumped in specific points associated with the gland, that gland will respond positively and return to a healthy state".²² But will it if its tempo differs from surrounding tissues? Gay Luce suggests that the rampant growth of cancer cells indeed differs markedly from surrounding cells. She suggests that constant shifting from natural circadian rhythms and exposure to extended periods of constant light could affect cell reproduction and hence be a cause of cancer.²³ Similar frequencies of light and sound pulses can trigger epileptic attacks, induce altered states of consciousness, and cause nausea. Beal notes that accident rates of automobiles and aircraft appear to increase when warm fronts and solar activity coincide.²⁴

Perhaps this is really a return of consciousness to its root source, the natural forces of the universe. As Jose Arguelles points out, it is the "primordial process by which man

receives cosmic consecration through identification with transcendent forces, whether these forces be 'spiritual' or related to the cycles of the earth and the heavens".²⁵ It is the syncretism of the total field of harmonic opposites in a continuous metamorphosis of symbiosis and morphogenetics.²⁶ We, as animals, are surrounded by a physical universe to which we adjust by the process of ecostasis. As human animals, we are in the self-created universe of culture which is essentially symbolic and to which we adjust through the process of heterostasis.²⁷

Since the ebbing and flowing of energy is so much a part of us, it could be said that our own energy field reflects the multitude of moving and expanding energies of our body. Field phenomena associated with body energy are: metabolism of the body and its production of heat, to emotional excitement, rate and quality of breathing, other activity, and rest. In turn, these are affected by atmospheric conditions, relative humidity, polarity of charges in the air, and other factors.²⁸ For a

25. Jose Arguelles, *The Transformative Vision: Reflections on the Nature and History of Human Expression* (Berkeley: Shambhala, 1975). See also Preston Harold, and Winifred Babcock, *The Single Reality* (New York: Dodd, Mead, 1971).

26. Robert A. Smith, III, "Our Passport to Evolutionary Awareness", in John W. White, ed., *Frontiers of Consciousness* (New York: Avon, 1975). See also, Peter S. Adler, "Shapeshifter's Dance", *Main Currents* 32, no. 1 (1975).

27. Ludwig von Bertalanffy, *General systems Theory* (New York: Braziller, 1969). See also Ervin Laszlo, ed., *The World System* (New York: Braziller, 1973).

28. John C. Pierrakos, "The Energy Field", in Nicholas M. Regush, ed., *The Human Aura* (New York: Berkeley Publishing Corp., 1974). See also Victor G. Adamenko, "Electrodynamics of Living Systems", *Journal of Paraphysics* 4 (1970); and, John W. White, ed., *The Highest State of Consciousness* (New York: Doubleday, 1972).

22. William A. Tiller, "Radionics, Radiesthesia and Physics", in *The Varieties of Healing Experience* (Los Altos, California: Academy of Psychology and Medicine, 1971).

23. Gay Geer Luce, *Biological Rhythms in Human and Animal Physiology* (New York: Dover, 1971).

24. James B. Beal, "The Emergence of Paraphysics: Research and Applications", in Edgar D. Mitchell, *Psycho Exploration: A Challenge for Science* (New York: Putnam, 1974).

time we have used "static" diagnosis through X-ray plates and Kirlian photos which are merely extensions of X-rays of energy fields. It would seem to me that, based on the experience of Shafica Karagulla who perceives energy fields in her patients, also we should concentrate on videotaping techniques rather than still photography because energy pulsates. Having had the opportunity to watch my own heart beat when dye was inserted during an anginagram test, I can verify the awe I felt. I believe a wedding of the scientific known and bioenergetic unknown could take place and "instant playback" could replace still photography and we would learn a great deal more about energy fields.

As we, as a human species, have evolved through symbolism we have largely lost our ability to converse with our environment in the language of direct experience.²⁹ The language of direct experience may be vibrations or "vibes". Vibrations communicate a sense of movement or direction and are "tuned into" as communication by resonance. As Jantsch points out "communication by resonance, which thus seems to be at work in the physical aspects of life, may be basic for its psychic manifestations and possibly constitute one of the general principles underlying all evolution in the physical, biological, social, and spiritual domains".³⁰ Prigogine's principle of "order through fluctuation", Whyte's "unity through diversity", Maruyama's "symbiosis through heterogeneity" and Jantsch's "resonance through diffusion of vibrations"

29. John N. Bliebtreau, *The Parable of the Beast* (New York: Collier, 1968). See also Franz From, *Perception of Other People* (New York: Columbia University Press, 1971); especially page 65 on "Moods of Nature".

30. Erich Jantsch, *Design for Evolution: Self-Organizing and Planning in the Life of Human Systems* (New York: Braziller, 1976).

are really saying the same thing from different disciplinary vantage points.³¹ John Lilly states it succinctly: "The miracle is that the universe created a part of itself to study the rest of it, that this part, in studying itself, finds the rest of the universe in its own natural inner realities."³² Michael Polanyi elaborates: "Perception on which gestalt psychology centered its attention, now appears as the most impoverished form of tacit knowing. As such, it will be shown to form the bridge between the higher creative powers of man and the bodily processes which are prominent in the operation of perception."³³ In other words, the process of formalizing all knowledge to the exclusion of tacit knowing is self-defeating. Tacit knowledge enables us to know that humans, and all nature for that matter, possess emergent qualities not to be found in fixed mathematical equations or in tables found at the back of engineering books.³⁴

Teilhard, Oliver Reiser, Bergson and Einstein postulated strong beliefs in emergent characteristics of nature rather than fixed characteristics such as Kohler's dynamic equilibration or Skinnerian S-R, or Marxian dialectics. As Loren Eiseley would put it, we are taking "the immense journey" and ready-

31. Magoroh Maruyama, "Symbiotization of Cultural Heterogeneity", *General Systems* 18 (1973).

32. John C. Lilly, *The Center of the Cyclone: An Autobiography of Inner Space* (New York: Julian Press, 1972). See also Duncan B. Blewett, *The Frontiers of Being* (New York: Award Books, 1969).

33. Michael Polanyi, *The Tacit Dimension* (New York: Doubleday, 1967). See also Geoffrey Vickers, *Value Systems and Social Process* (New York: Basic Books, 1968).

34. See Julius Stulman, and Ervin Laszlo, eds., *Emergent Man* (New York: Gordon & Breach, 1974); and Loren Eiseley, *The Immense Journey* (New York: Vintage Books, 1959).

made solutions and simple fixes do not offer the best sign posts, for the reality we know in our abbreviated lives is utterly dwarfed by the "unseen potential abyss where science stops".³⁵ Gopi Krishna captures the essence of Eiseley and Polanyi in these words: "This is the divine eye which sees the one in the many and unity in diversity. . . . The phenomenal world seems no longer to be a Monstrous Cauldron of revolving masses and clashing forces, but the planned creation of a cosmic intelligence ruling every atom of the colossal host."³⁶ Life thus might be described as the eternal rotation of the past and the future in the present or now, or as synthesis through constant confrontation of opposites to bring about unity—a unity not fixed but always evolving. It is moving from the formed to the forming.³⁷

The pantheism of St. Francis, Tagore and Goethe, and that Ionian philosophy called hylozoism or "wood life" exhorts us to recognize that life and matter form a differentiated or symbiotic unity interacting in an active, eternal cycle. However, in its continuous forming process and its continuous differentiation and integration emerges the synergy of something different, an emergent whole not perceived at each level of development—a variation essential for adaptation and a specialization essential for survival. It is what Sri Aurobindo envisioned as Auroville—the city of dawn, of eternal beginning, now rising in south India.

35. Ibid., Eiseley.

36. Gopi Krishna, *The Awakening of Kundalini* (New York: Dutton, 1975). See also Sri Aurobindo, *The Mind of Light* (New York: Dutton, 1971).

37. Kitaro Nishida, *Intelligibility and the Philosophy of Nothingness* (Honolulu: East-West Press, 1966). See also Robert A. Smith, III, "The Formed and the Forming", *World Union* 15, no. 6 (June 1975).

Basically in describing fields and forces I have attempted to play the part of the polemicist or one who provides choices, or, put another way, where humans are put in a position to choose and usually must choose. For "concepts and images, alone, can never convey the subjectivity of truth; only experiences which affect the innermost being accomplish this".³⁸ Beethoven must have discovered this for he experienced a transformation through fusing himself as an actor with himself as a spectator or between doing and looking, and his music reflected the wonder of existence.³⁹ It was an empathetic awareness of life. The Haitian poet, Aimee Cesaire, captures its essence in these haunting words: "flesh of the flesh of the world throbbing with its every movement". Emerson, Rudhyar, Thoreau, da Vinci, Whitman, Wordsworth, Rilke, Tagore, Nijinsky, Laban, Rumi, Martha Graham, and Hesse must have deeply felt this resonance and heard "the music of the spheres". Karlheinz Stockhausen captures it in his music— in transcending spirals within spirals. It is truly the essence of Julius Stulman's beautiful expression—fields within fields . . . within fields.

Stulman puts it this way: "We shall come to learn that the 'energy system' we are is inextricably interrelated in methodological rhythmic patterns of the universe and that time and space reside within man's own heightened comprehensive ability to resonate

38. Allan Janik, and Stephen Toulmin, *Wittgenstein's Vienna* (New York: Simon & Schuster, 1973). See also Warren Stubbles, ed., *Essays on Metaphor* (Whitewater, Wisconsin: The Language Press 1972).

39. Manfred Clynes, "The Biological Basis for Sharing Emotion: The Pure Pulse of Musical Genius" *Psychology Today* (July 1974). See also Lorin Loverde, "Aesthetic Education and Integrational Analysis", *The Journal of Aesthetic Education* (January 1975).

energy patterns—fields within fields . . . within fields.” As Reza Arasteh puts it, we are in position to go from a cosmic fetalization to existential rebirth, for our archetypal hologram is manifesting itself in the full meaning of Reiser’s cosmic humanism—humanity resonating to field forces. It is Robinson Jeffers’ organic wholeness, the wholeness of life and things, and the divine beauty of the universe to which we humans are so inextricably bound. It is a favorable moment in cosmic time for our fields to pulse and to rhyme.

While feeling that it is a favorable moment, I would also agree with Peter Marin in his article, “The New Narcissism”, that a failure to understand the fields of life in the social sense can lead to “a retreat from the worlds of morality and history, an unembarrassed denial of human reciprocity and community”. He continues: “In the worship of the state, life gives way to abstractions. . . . In the worship of the self, life . . . gives way to an abstraction . . . an exaggeration of the will.” In other words, the radiating field of human community is silenced, for: “The felt presence of the other disappears and with it, a part of our existence.”⁴⁰ For it is only away from the abstract and the bureaucratic wise that we can both touch the earth again while we kiss the skies and feel the sentience of total communion with nature and our human friends.

Yonder comes the dawn
The universe grows green,
The road to the underworld
Is open! Yet now we live,
Upward going, upward going!
Tewa (A Pueblo people)

40. Peter Marin, “The New Narcissism”, *Harper’s* (October 1975).

Collective narcissism in groups can never replace the essence of community and social reciprocity. While we may contemplate the “Navel” of the universe we must feel and be constantly aware of the Soul of our fellow humans. Perhaps our best response is to create living networks of diverse talents to symbiotically safeguard human community and reciprocity while morphogenetically we move toward the very center of the creative process—fields radiating within fields within fields.

Anne and Fred Richards provide fitting conclusion in their recent book, *Homonovus: The New Man*:

When the reciprocal functions of man’s perception of himself and his perception of external reality fail to function harmoniously, when each fails to complement or contribute to the balance of wholeness of each . . . man becomes the shaper and victim of a world with which he can no longer orchestrate himself. . . . While celebrating human diversity and perceiving clearly particular aspects of the *total field* of human experience, he perceives and embraces each as related parts of an organic whole, differentiation emerging out and rooted in a total universal ground.⁴¹

41. Anne and Fred Richards, *Homonovus: The New Man* (Boulder, Colorado: Shields, 1973).

. . . the resolution of contraries reveals a world in which personal identity merges into all the processes of relationship in some vast ecology or aesthetics of cosmic interaction.

Gregory Bateson
Steps to an Ecology of Mind

**To see the world in a Grain of Sand
And a Heaven in a Wild Flower
Hold infinity in the palm of your hand
And Eternity in an hour.**

William Blake

Movement is a synthesis . . . a unifying process, culminating in the understanding of personality caught up in the ever-changing flow of life.

Rudolph Laban
The Mastery of Movement

CURRENTS OF EVENTS

Ronald Jorgensen

AN EMERGING UNITY WITH THE PAST

By focussing only on the unity that can be developed in space—geographical and psychological, of nations and persons—a slighted and shortened vision is bound to result that cannot hold the full experience union promises. And, of course, most all of the concern with human unity seems to be expressed just so: exclusively in frames of space.

Time, the other primordial pole of material duality, was surprisingly cover-storied in the issue of *Newsweek* dated 1 September 1975, concerning what is called the "new archeology's" view of the past. Several very significant points were made. First was the unexpected evidence suggesting that discoveries of metals, the wheel, agriculture, et al., were not made initially from Egypt or the Near East and gradually passed to France, England and other areas. Rather, that these discoveries were simultaneous (archeologically speaking) in several areas of the earth. The second finding is that civilization is not only much older than expected, but that there existed bigger populations in some areas than there are now, and some of these more than ancient peoples' proletariats had more leisure time than presently well-treated workers in places like the United States.

The article concluded that this shows a more highly developed past reaching farther back with many more than the familiar few centres like China, Egypt, India and Persia we customarily consider. But these implications also tend a suspicion that the evolution of civilization has less to do with the aggregation and refinement of populations and technology than with the waxing capacity to conduct them in a balanced, harmonious way. Reasons for the collapsing of such antediluvian achievements, before the cycle of epochs spiraled to its present high wave again, may involve precisely an inadequate balancing and harmonizing, a task we are historically called to do in an even higher and more complex range of possibilities now—which exactly corresponds to the increased degree of evolutionary capacity and adventure emerging in human civilization. It has increased from a tribal to a metropolitan to a national to our pressing global setting in full objectivity (although the simultaneous discoveries in the *Newsweek* article hint there may have been a subliminal global mind in play behind the divisions of humanity even then). It seems we are the explicitly risen meridian of the dim ancient horizon.

CHILDREN AND WOMEN

One signature of the present cycle's crest is the progressive unhousing of the era's long disharmony of relationship pressed on children and women by adults and men. Women's

restoration to true collaboration in our affairs is often spoken of as maybe the last liberation after religious, racial, political, and social freeings.

The beginning of 1976 has done something guilelessly powerful to lift 1975's International Women's Year out of the drag-down aftereffect these special "Days", "Weeks" or set aside "Years" often provoke as soon as they have passed: a UN decade for women has been proclaimed by that organization's Social and Humanitarian Committee (*Indian Express*, 7 December 1975). After ten years of concentrated vivification the social estate may not retain enough residual drag to manage a relapse into dominance by sex.

Still, women constitute only about half of humanity; though children are a smaller percentage, they include all of the race in their own way. Racial crusaders may claim their sufferings make others look well off, women's liberators may insist no cause carries the fundamentals as theirs does, but truly there was never a greater oppression than the mostly unconscious, unremitting campaign converging from white and black, men and women, on the lives of children. Children are the only ones so overpowered and helpless—by adult advantage and their own mute capacities--that their case never reaches the world's thoroughfares of communication.

In India a children's day was observed where conditions of child labor, destitution and orphanage are particularly being addressed, according to recent newspaper reports. The last one, "Children's Village in Assam", contributed by the *Hindu* on December 24, 1975, clearly declares that the effort will not simply be to provide a place to grow up (for the destitute and orphaned children resulting from last year's unprecedented floods), but a chance for individual development. The village has, it is reported, "a village kindergarten with a trained teacher", and "no regimentation is permitted".

Since New Year's Day a "children's charter" has come into legal force in England; it is considered to be a milestone, at least by its sponsor, in the English history of children's law. One of its most illustrious features requires courts and local authorities to consult the child concerned before the adoption decision is settled (*Indian Express*, 2 January 1976). From one point of view, here is a milestone; from another, it only establishes a normal state of affairs—a (smaller) person is consulted about his or her place of residence and companions.

It is too early and indefinite to sense what this wee awakening regarding children may soon become. Its full dawning will be the grand dignity and joy of human unification, with itself and with its own forming future.

A more momentary view of union could interpret a child's liberation from the dominating aspect of relationships with adults as weakening unity, or at best weakening discipline, and so see it as a discouraging tendency. Moving out of the nursery into international relations may clarify this more satisfyingly.

DECLINING DOMINATION

Politically and Economically

Not surprisingly it is the sort of son-father relationship between Canada and the United States which provides some of the headiest material. Building for some time, the

dialogue rushed into explicitness when William Porter, America's retiring ambassador to Canada, seasoned his already bristling remarks—implying Canadian ingratitude via her growing independence from American suzerainty—with this question to the prime minister: Why had Mr. Trudeau refused to allow his foreign investment agency to appear before a U. S. Congress sub-committee which was to study Canada's policy on foreign investment? His answer set a new precedent in publicly expressed relations with the United States.

"It is not proper for members of the Canadian public service to appear before legislative bodies of other countries," Mr. Trudeau said. "We are not a colony of the United States." [*Indian Express*, 17 December 1975]

Ideologically

The recent shuffling of positions and proposals between the USSR and the Communist parties of Rumania, Yugoslavia, France and Italy is shifting the already perturbed subordination to Russia into the clear vibration of ideological independence. Occasioned by contrary approach-proposals for the Soviet sponsored European Communist conference, this process has been fairly widely reported; on 15 December, however, *Newsweek* carried a prescient summary of this emerging third center in communism after Russia and China:

"Eurocommunism"—which has also been called "white communism" or "neo-communism"—may become a decisive factor for European history and East-West relations. It challenges the traditional political balances in the West, but it also threatens the rigidity of Soviet power in the East.

Aside from its obvious benefit to the germination of the future in preventing ideological terrain from crusting over, it provides a counterpart in the Russian sphere to phenomena like the Canadian affirmation in the American sphere. These apparently destructive breakaways, like the child's release from parental domination, are immaculately necessary for the crowning growth toward world unity. For, what country can beam its unique color into the rainbow of global concert until it knows the hue, the depths, the miniature rainbow harmonies of expression of its own national being; and what nation can come to this self-knowledge under the stress-shaping will of a huge power like the United States or the Union of Soviet Socialist Republics? Unlike the fortunately unsuccessful attempt of Great Britain for a separate seat from European Economic Community representation at the Paris conference on international economic cooperation in December—which involves an entirely different dynamic—these Canadian and European developments are gatherings of light, which will encourage other declinations of domination.

7 January 1976

REVIEWS

Other Worlds, Other Universes: Playing the Reality Game, edited by *Brad Steiger* and *John White*. Garden City, New York: Doubleday & Company, 1975. 245 pages, \$7.95.

Other Worlds, Other Universes is itself a sign of that evolutionary nisus towards integrity which it celebrates. And this innate urge toward wholeness, order, and harmony in an increasingly rich measure—the tendency and process now termed syntropy—has not only, it would seem, stimulated the elements of this book but has shaped its overall design and execution. For, the emergence of its sixteen essays as a whole is largely by virtue of the purposeful arrangement provided by the editors. It is their general introduction that initiates the unfolding, and the transitional prefaces to each of the volume's five sections that suggest the progressive synthesis.

The movement of the volume, in the words of the editors, is "from orthodox science through occult science to spiritual science in search of omni-science"—thus adding a dimension or two to the current consideration of the science and religion interface; science is rediscovering and validating in its own terms esoteric and spiritual perceptions of the nature of existence. Each phase of that movement is a step in what Brad Steiger has termed the Reality Game, the object of which is a growing understanding of the cosmos and ourselves leading to societal transformation. Within its own progression, the book seeks a dynamic balance of the intuitive/experiential and the rational/experimental.

Luis E. Navia opens with an invitation to new cosmological perspectives and a call for creative speculation as he considers the potential metaphysical and psychological impacts of extraterrestrial life. In "Starseed: A Way Out" Timothy Leary presents his ambitious if surprisingly mechanical plan to establish contact with "Higher Intelligence" beyond earth through a space probe to the centre of our galaxy. A programme to plan, build, and launch such a starship city—a utopian replica of earth—demands a degree of technological, social, and spiritual sophistication hitherto practically unimaginable: a challenge which makes the proposal interesting.

Part two, "Other Civilisations: The Prehistory of the Earth", puts forward two iconoclastic views regarding the length of man's past and his origin. An excerpt from Gerald Massey's *A Book of Beginnings*, published in 1881, recalls his then nearly heretical con-

tention that species homo sapiens arose in Africa. It was fifty years later that his claim first came to be supported by discoveries in the Transvaal and most recently by the finds of Mary Leakey in Tanzania which place the oldest known "man's" existence at 3.75 million years ago. The editors indirectly invoke this substantiation to encourage consideration of the now equally radical "intuitive archeological" hypothesis of Nada-Yolanda that humanity's origins are to be found 206 million years ago. Both theories recollect, though differently, the aeonic cycles and previous existence of golden ages recorded in virtually all spiritual and religious traditions.

In continuation of the search for other lifeforms with which the collection began, part three looks from different angles through four articles at the phenomena of UFOs. With the note that exobiology can be seen as both the leading edge of science and the lunatic fringe, a number of explanations besides UFOs as interplanetary transportation vehicles are offered.

Trevor James Constable maintains that certain UFOs are biological entities not mechanical objects: plasma-bodied atmospheric "critters" which exist in the infrared portion of the spectrum. Though therefore normally outside the scope of human sight, Constable has photographed them using infrared film. Out of careful research, Dr. Jacques Vallee proposes that a direct correspondence may exist between the tales of meetings with fairies and "little people" contained in world folklore, and current UFO contact reports. Similarly, it is thought possible by Reverend Barry Downing that some of the heavenly beings and miraculous occurrences chronicled in the Bible may find factual corroboration through ufology.

David Spangler, a director of the Findhorn Foundation, brings the "Look at UFOs" clearly to focus with the perception that these "craft do not travel through space as we know it but through dimensions of consciousness". So visioned, the critters, fairies, and angels (and other "UFO phenomena") may be understood as beings inhabiting (and phenomena native to) other planes of consciousness: perhaps the subtle-physical, vital, and spiritual-mental respectively. Spangler concludes that "The myth of the extraterrestrial [which he regards as mankind's 'confrontation with the cosmic'] reflects the promise and the opportunity of planetary transformation and the birth of cosmic consciousness, but we, as humanity, must embody and be its reality."

The fourth section continues the movement into these other dimensions—from the extraterrestrial to the extradimensional, from cosmology to theology and spirituality. The universe is now recognised to be composed of distinct but interpenetrating strata of consciousness. Noting the view of Sri Aurobindo, the editors point out that when this hierarchy of consciousness-levels is seen from the base upwards, matter in its evolution becomes spiritualised, and seen from above, spirit in its involution becomes densified, materialised. And where are these planes of consciousness? "All sources agree: They are within us, even

though they seem to be without; and at the same time they are without, even though we arrive there by going within."

One illustration of that inner/outer connection is the inner out-of-the-body experience (OOBE). In his study of OOBEs, D. Scott Rogo stresses the still not widely appreciated difference between brain activity and the functioning of consciousness—though he does not here mention the even larger ramifications of the mind/consciousness distinction. Yogi Ramachakra in his transcribed talk on the astral world offers the central clarifications that a plane is a state not a place, and that a soul must be incarnated upon earth if it aspires to evolve.

Arthur Ford's narration to Jerome Ellison of the research into the stages of life beyond death made by Frederic Myers records something of the articulate psychical investigations Myers carried on thirty years before and thirty years after his passing. His after-death communications through various trance mediums employed intricate cross-correspondences to validate their source and authenticity. Though there are some significant variations, Myers' findings—evolution is primarily of consciousness with physical change resultant; reincarnation is a necessary corollary of evolution; existence is composed of seven ascending planes; etc.—largely parallel recognised occult and spiritual knowledge. This is also true of the selection from Rudolf Steiner's *Knowledge of the Higher Worlds*. Steiner here emphasises that the higher realms are open only to those who approach with humility and the aspiration to serve the world. Thus any capacities gained by a seeker would be utilised purely to enable the individual and collective perfection of others which is only possible on earth.

The dynamic between the apparently contradictory evidences that there are an infinity of other worlds and that earth yet somehow retains a certain centrality in this vastness finds expression and some direction, if not full resolution, in the book's concluding section, "Other Universes: Return to Godhead". This relation is analogous to that between an understanding of the nature of the universe and of man's individual consciousness. Both relations are basic themes throughout the work.

The interview with Ivan Sanderson deals primarily with the cosmic element of these relations through his theory that there are multiple, interlinked universes, each of which can only be three dimensional. Sanderson does interestingly touch upon a connection of both elements in an acknowledged but effective oversimplification: "Einstein said if you can go on to infinity in one direction you will eventually hit the back of your head." Dr. Oliver Reiser, the scholarly and imaginative proponent of the world view of cosmic humanism, examines and interprets the astronomical discoveries of quasars, pulsars, and "black holes" in support of the unique essentiality of earth and man within "an incredible cosmos of billions of stars in hundreds of billions of galaxies".

The presentation by Dr. Wilson Van Dusen of the comprehensive vision of Emanuel Swedenborg (1688-1772) again reflects the microcosmic and macrocosmic interplay. "We

have access [within] to all the potentialities of the universe. . . . For we are, after all, the image of all there is, which is not a prideful position but one of great responsibility. We are the hinge or fulcrum of existence, each the fulcrum of all the spiritual worlds." The fugue-like movement which characterises *Other Worlds, Other Universes* culminates with passages from Olaf Stapledon's science-fiction classic, *Star Maker*. His revelatory narration "from within the cosmical mind" of the birth and death and rebirth of a universe fuses the individual and universal poises and suggests the transcendental.

An always interesting and a widely reflective work, this anthology provides preliminary sketches to be considered in the preparation of the precise cartographs of other worlds and dimensions of consciousness which will eventuate from the union of science with spirituality.

Tatsat

A member of the Sri Aurobinbo Ashram for the last five years, Tatsat is a twenty-nine year old American who does work largely of an editorial nature. One of his projects during the past year was coordinating the preparation of a line index to Sri Aurobindo's epic, Savitri. Tatsat's poems and reviews have appeared in a number of journals.

Frontiers of Consciousness: The Meeting Ground Between Inner and Outer Reality, edited by *John White*. New York: Julian Press, 1975. 366 pages, \$8.95.

A capital production, this collection of twenty-two essays lays out some of the directions and fields in which and through which human consciousness is expanding: transpersonal psychology, biofeedback and meditation techniques, biotechnology, alternate perceptions of insanity, ecological awareness, space exploration and the investigation of extraterrestrial life, the inquiry into after-death states, and more. The contributors include scientists, philosophers, doctors, and psychologists. The editor, John White, introduces the subject with a vigorous discussion of what constitutes "consciousness". In its course, he provides a short and accurate definition of consciousness as the "fundamental ground of all experience".

In the first article, speaking of the promising relationship that is presently developing between Western psychiatry and Eastern spirituality, Dr. Stanley Dean draws attention to the healing factors intrinsic to the latter which could enrich the modern psychotherapeutic armamentarium. His remarks on cosmic consciousness and Zen technique are particularly worth noting. In the next section, Elsa First brings fresh light to the consideration of the phenomena of "madness". She reflects the growing awareness that unfamiliar (though not

wrong or deviate on that account) approaches and reactions to the impact of the Reality are mistakenly labelled lunatic. Wilson Van Dusen's discussion of "Hallucinations as the World of Spirits" focuses attention on the contribution of Emanuel Swedenborg to the occult heritage of modern man. The reference to lower-order "voices" which follow some individuals pitilessly "illuminating their weaknesses" recalls the similar function discharged by the "Censors" of the old Indian occult tradition.

In the first of two articles contributed by the editor, entitled "The Yogi in the Lab", is an explanation of biofeedback as a technique made possible by scientific technology for "human self-monitoring and control of physiological processes and psychological states". This new science's relation to meditation and extrasensory perception is discussed. Mr. White's second paper, on "Plants, Polygraphs and Paraphysics", is again highly illuminating, particularly his analysis of the constant communion between the plant world and the human.

Dr. Edgar Mitchell, lunar module pilot on the Apollo 14 expedition, is brief but effective in pleading for a new holistic approach in which science and religion shall join hands in exploring the boundless domains of man's consciousness. Writing of his experience during his time in space, he observes: "When you see planet Earth as a blue and white haven, a magnificent speck in the vastness of the empty space that is not really empty, you think of what the people are doing. You remember the wars that are going on at that very moment. You remember the needless and wasteful ravaging of the Earth. . . . They are going on primarily because of our egoistic drives. . . . We must change the course of human evolution. We must change the thinking of mankind to view planet Earth in its proper perspective."

Robert A. Smith's well-argued article examines how general systems theory can promote the evolution of a greater consciousness. Its integrative view and models for action stress, in the expression of the editor, "fusion instead of confusion".

The last two sections of the book on the possibility of life beyond earth and on the altered states of consciousness—some mystical, some profoundly blissful—that are experienced in many cases of near death are highly educative and confirm yogic experience.

A book to be read, studied, and consulted, *Frontiers of Consciousness* is an important contribution and a definite stimulus to the enlargement of the mind.

M. P. Pandit

Chairman of World Union International and editor of this journal, M. P. Pandit has been a member of the Sri Aurobindo Ashram for thirty-six years. An exponent of the philosophy and yoga of Sri Aurobindo, he is the author or editor of more than eighty books on that teaching and on the classical scriptures of India. Mr. Pandit regularly contributes reviews to many Indian journals.

FOCUS

Is nationalism an obstacle to the functioning of a world government? When people speak of nationalism they usually mean the habit among the state populations of putting their own interests above the common good of humanity. This habit is an effect, not of the natural diversity of the nationalities—which is one of the most precious features of mankind—but of the present political world disorder. It will start to melt away as soon as this disorder is displaced by political world order.

J. H. C. Creighton

EXECUTIVE COMMITTEE MEETING

The seventeenth annual meeting of the executive committee will be held at the Ashram's Parc Guest House in Pondicherry on Saturday the 21st February 1976 at 2:30 p.m. Every World Union centre with more than ten members is invited to send one representative, and a centre with more than twenty-five members, two representatives to participate in the meeting.

We are meeting at a time when conditions within nations and in the world demand new thinking of a constructive and creative nature; important subjects are on the agenda for consideration. The executive committee will consider subjects such as the development of youth wings, proposals for rewriting history and economics textbooks, the increasing development of the journal, *World Union*, the appointment of World Union India Centre's educational research and approach committee, and reports on the oneness quotations compilation project. A full report will be given on the design and preparation of the fifth triennial World Union conference which is to be held at Pondicherry on 8, 9 and 10 January 1977. A similarly complete briefing will be given of the formation of the World Union India Centre, based at Bangalore, whose central council is due to meet at Pondicherry on 22 February 1976. The executive committee will be asked to suggest a theme for the celebration of World Union Day, 20 August 1976, and to offer guidance to all centres for this celebration. The term of the second World Council expires on 31 August 1976 and the committee will be consulted about the formation of the third World Council, which will sit for a period of six years beginning 1 September 1976. Consideration will also be given to approval of the annual report of the general secretary which is published in this "Focus". World Union International's 1975 audited accounts will be presented for scrutiny and necessary decisions.

Serious thought will have to be given to the financial problems of World Union. To give an instance, the introduction of new overseas postage rates will drive up the cost of mailing *World Union* from Rs. 0.55 (at the beginning of last year) to Rs. 1.50 per copy. The cost of paper, envelopes for posting magazines, and printing is high and is rising; the correspondence with members overseas has become costly. We will have to decide how to meet this financial situation.

We have also to consider how to be more effective for the realisation of the central aims of World Union: human unity and peace within nations and in the world, and to ultimately reach as speedily as possible the world union of free and independent nations which Sri Aurobindo saw. For this purpose we have not merely to establish contacts with other similarly oriented organisations and individuals, but to find out how to actively cooperate with them in order to influence, to our full capacity, world affairs and, in particular, world leaders who have the power and opportunity to shape the future of the world in this direction. It is not sufficient that only the Pondicherry office does this; the important centres of World Union should also go into action. It is necessary that World Union now converges on the task of actively influencing movements which will bring about harmonious human relations in regions, in nations and in the world. We have already done enough spadework to spread the ideal; it is essential we now begin activities which will manifest and express human unity in everyday life.

NEW YEAR MESSAGE OF THE SECRETARY-GENERAL OF THE UNITED NATIONS

"Nineteen seventy-five, the thirtieth anniversary year of the United Nations, has seen the world organization in a state both of development and of ferment. Reflecting as it does the political and economic currents and trends of the contemporary world, the United Nations naturally goes through periods of discord and controversy.

"What in the long run were more important in 1975 were the signs of a general recognition of the necessity for a real dialogue in the United Nations on global problems. This was particularly true of the Organization's meeting on one of the greatest problems of all, the seventh special session of the General Assembly on international economic cooperation and development. This session represented a major step forward both on the substance of this enormous problem and also in the capacity of the United Nations to achieve practical results on vital issues.

"The Security Council, in an exceptionally busy year, has also shown steady progress in its ability to deal with complex and critical problems through the individual and collective efforts of its members. Both in the Council and in the Assembly, member states are trying to find their way in the world and at the same time learning to use the very complex and novel political instrument of a universal world organization.

"This is a tremendous undertaking, fraught with enormous difficulties. But we should take courage from the fact that the overwhelming majority of nations wish to take part in the United Nations, to make it work and use it to build a more peaceful and prosperous world. The obvious shortcomings and failures of the Organization should be seen in that perspective.

"We approach 1976 with a fuller and more varied agenda than ever on the political as well as on the economic and social side. A never-ending effort must be pursued to put general principles into effect, to build on agreed guidelines for the evolution of a new international economic order and to persist in the search for a settlement of those political conflicts which threaten not only the countries immediately concerned but also the general peace.

"In spite of all the difficulties and the much publicized differences, there is an increasing and more urgent awareness that the United Nations must be strengthened and that this can only happen through greater efforts by its members. No human problem is insurmountable if the will to surmount it and the capacity to cooperate can be mobilized.

"We are living in a fascinating, though often incoherent, period of change and development. The need for international cooperation and order has, perhaps, never been so great. In the last quarter of this century, that is the greatest challenge and the greatest opportunity for the governments and peoples of the world."

ANNUAL REPORT

In the year 1975 there have been important events in the work of World Union which will have far-reaching effects and accelerate the progress of the World Union movement.

First, *World Union* became a monthly journal in January, and is attracting international attention in many noteworthy quarters. Because of the rise in paper and printing costs we have been obliged to slightly increase domestic subscription rates; further, owing to the very recent rise in overseas postage we now have to revise rates of subscription for countries other than India. We are in need of support from all friends and supporters to make ends meet.

For a week in January of 1975, A. B. Patel, the general secretary of World Union, attended the sixteenth congress of the World Association of World Federalists in New Delhi. This provided an opportunity for him to meet with leaders of three movements working for world government. First was Dr. Max Habicht of Switzerland, the then chairman of the World Federal Authority Committee based in Oslo, Norway. As a result of this acquaintance Dr. Habicht, upon his return to Europe, invited Mr. Patel to become a member of the Committee. Information about this organisation has already appeared in the April 1975 "Focus". The second leader was Mr. Reinhart Ruge, the president of the World Constitution and Parliament Association located in Lakewood, Colorado, U.S.A., who visited the Sri Aurobindo Ashram for a week at the beginning of February 1975. For information about this organisation, see the same April 1975 issue of "Focus". The third person had briefly met Mr. Patel some time earlier in Europe. He is J. M. L. F. Keijser of the Emergency Council for World Government, which is centred in The Hague, the Netherlands. Mr. Keijser has become the Emergency Council's leader since the passing away of its founder, Dr. J. H. C. Creighton in 1975. Though the general secretary had been enrolled as a member of the Emergency Council when visiting The Hague in August 1974 and had met the workers in its offices, his opportunity of spending time with Mr. Keijser was much greater in New

Delhi. Significant world figures are enrolled as members of the Emergency Council, and now an inviting team, with Mr. Keijser as its secretary, has been constituted of four council members to further extend such invitations. For more details on this organisation see the description found also in the April 1975 "Focus".

During the year, several new World Union centres have been formed but a particularly important development is the formation of the West Bengal State Centre to which are affiliated all the World Union centres in that state. West Bengal's Sri Samar Basu has been carrying on the work of World Union very actively and energetically; besides a number of new centres, youth wings and women's wings have been formed there.

A most important event of 1975 for the organisation was the holding of the first convention of World Union centres of India at Bangalore in June, when the formation of the World Union India Centre was proposed. Happily, the constitution of this new centre was finished last December and its central council, under the presidentship of Prof. N. S. Govinda Rao, has been formed with its offices at Bangalore. For the first five years, at least, it is intended that the India Centre will concentrate on the work of national integration in co-operation with consonant individuals and organisations-- governmental and non-governmental. All World Union centres are urged to give their fullest cooperation in this work toward Indian unity, for it is clear that the integration of every nation is essential before world unity can take effective shape.

Last fall it was decided to hold the fifth triennial World Union conference at Pondicherry on January 8, 9, and 10, 1977, when it is intended to provide a forum that will prove effective for reaching thoughtful and creative decisions towards the next future.

ORGANISATIONAL ACTIVITY

World Union Centres

Bangalore A meeting on 7 December 1975 was convened for a lecture by Dr. B. N. Luiparaju titled "Health and World Union". In part of the lecture he compared the aims and scope of World Union with the World Health Organisation, but most of his attention was directed towards the range and nature of the phenomenon of health and disease. He suggested that the relevance of health begins at conception and includes the antenatal, natal, and postnatal periods, the stages of infant and child care, then expands to school health, and continues with marriage welfare and geriatrics. Dr. Luiparaju emphasised that contemporary medicine is not merely a biological field but a social one, as disease is considered to have a greater and greater mental dimension depending largely on the attitudes of men, of communities, and even of nations. After he closed, an engaging discussion was generated among members of the audience on the role of the state, of the society and its institutions, and of thinkers in the development of health planning.

Butwal, Nepal Butwal held five meetings in December, in which a diversity of subjects were studied. Readings from M. P. Pandit's book, *What Life Has Taught Me*, drew out an exchange of views among two of the centre's leaders. In a later meeting Sri M. C. Bharali asked why humans create crises for their own species, and how these related to nature's

crises. In responding, Sri S. K. Rattan said one had to first see what the reality is behind scenes of human and natural destruction, which requires a rising out of the mental, divisive, egoistic consciousness; then he added that such crises are a shock to awaken humanity to the realisation of its oneness.

In addition to discussions, the centre printed and circulated about 100 copies of an appeal on peace mailed by an American group called The Cooperators. Members were asked, in a 27 December speech given by the president, to "awaken to the integral Truth of life and in day to day life try to germinate the consciousness of Truth and Oneness in . . . all those with whom we come in contact". He added it was unquestionably time for the Butwal Centre to come out of its four walls and communicate with other groups of people.

North Calcutta In one of their general meetings, which are only held twice a year, the centre found its total membership—including students and youth—to be eighty-two persons. With the energy of such a large group they agreed to work in the following ways: open new centres, procure a common room for the centre's use, begin a children's training centre, expand the youth wing, conduct a sports and games section, continue work in the women's wing and in the field of national education and plan programmes and activities on the theme of "1976: The Year of Invocation to the Next Future"—particularly in drama where a theatre of the next future will be attempted under the influence of Sri Aurobindo's vision. The direction and coordination of these projects will be handled by a newly revised twelve-person executive committee.

In their regular monthly meeting, five new paintings of Sm. Krishna Sinha, a member, were exhibited. *Foundations of Indian Culture*, *The Human Cycle* and *The Ideal of Human Unity* by Sri Aurobindo served as the material for a three-person symposium about the spirit of future society and future mankind. In a report on the children's training centre's first meeting, much interest was given to a brightly spirited recital of poems of Sri Aurobindo by a six year old boy, Kumari Arpita Roy.

Tamilnadu In its first meeting following the inauguration of this new centre, persons in the fields of commerce, law, engineering, journalism, social service, and education came to hear Smt. Madhuban K. Shah, the centre's president, speak about the conjunction of spirituality and unity. She simply stated that, basically, everyone is divine—although this divinity is often hidden. The Bhagavad Gita's instructions make the realisation of this divinity practicable, but it involves a wide and generous sharing of our talents and achievements free of any mental reservation or jealousy. In the contact with this divinity—which is identical in everyone—one touches the reality of unity. It is that fusion which she encourages as the world's eventual homecoming.

Smt. Punithavathi Mahesan, an author and playwright, focussed her talk on the conquering and conditioning of the butterfly-like mind and on the imperative experience of uniting with the whole so a sense of totality develops. With this realisation, she concluded, the arts of love and giving are learned.

In a rather spontaneously developed consensus out of the discussion which followed, the new centre decided to work in sub-committees for the following projects: initiating contacts with students to share with them the ideals of World Union; organising cultural

programmes based on Indian national traditions, which is necessary for the work of national integration; encouraging and making comparative studies of various religions and philosophies. They will meet once a month for dialogue and to review the results of their efforts.

Uttarpara The women's wing, meeting on 21 December, heard speeches by two men on the force of the Mother, *matri-shakti*: N. K. Roy on its relation to Sri Ramakrishna's sadhana, and Samar Basu on Sri Aurobindo's elaboration of it. In the regular gathering on 6 December, Uttarpara's twenty-eighth meeting, world federal government vis-a-vis the UN was discussed. And on January 4, 1976, the new children's wing held its first meeting.

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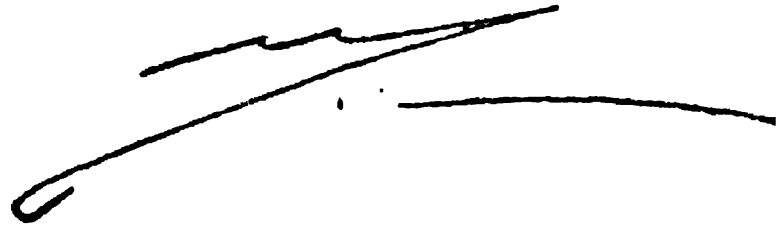
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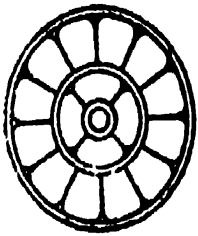
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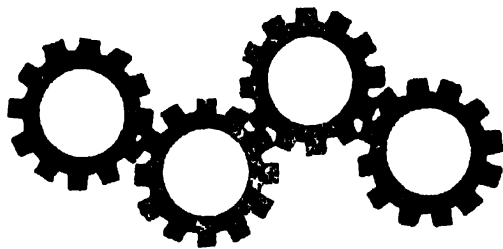
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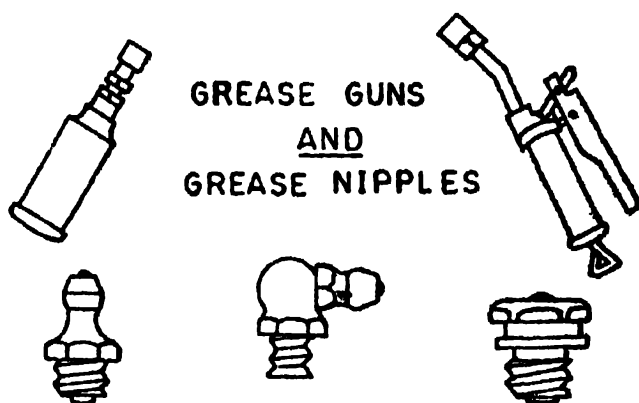
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Edited by M. P. Pandit

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EDITORIAL

The Awakening of Kundalini

Suddenly, with a roar like that of a waterfall, I felt a stream of liquid gold entering my brain through the spinal cord. The illumination grew brighter, the roaring louder . . . I [became] a vast circle of consciousness in which the body was a point, bathed in light and in a state of exaltation and happiness impossible to describe.

This is how Sri Gopi Krishna describes his first great experience of the ascent of the kundalini in himself. But this experience did not come to him after a few months or years of dalliance with the "tantra" so fashionably bantered about in books with catchy titles or pseudo-art publications purporting to represent the "tantric art" of India. At the age of seventeen Gopi Krishna began the discipline of meditating every morning for three hours, concentrating intently on the centre of consciousness above the eyebrows. After seventeen full years of this practice he was fortunate to realise the awakening and flaming of the serpent fire in his body. And yet all was not bliss thereafter. His system took time to assimilate the effects of the inner change. His description of this agonising interval is contained in his latest book, *The Awakening of Kundalini* (New York: E. P. Dutton & Co., 1975; 129 pages, \$3.25), with a candour that only a great mind can wield.

It was variable for many years, painful, obsessive, even phantasmic. I have passed through almost all the stages of different, mediumistic, psychotic, and other types of mind; for some time I was hovering between sanity and insanity.

I was writing in many languages, some of which I never knew. I was unable to meet with people, and was in a state of depression. I have passed through these stages, and then slowly my condition stabilized, till I had the first impression that something extraordinary had happened in me in the year 1949 [the capital transforming experience having occurred in 1937].

After that, I fluctuated for some time due to physical reasons. I had some attacks of illness when I could not properly look after myself. Soon after, however, I became stable in this present state of consciousness. The wonder is that it is still expanding, still developing, still be-

coming more and more beautiful and alluring. And it is this, my own experience, which has taught me that Kundalini is at the basis of genius, insanity, neurosis, prodigies, and other extraordinary states of mind.

Clearly, the author writes from direct experience in addition to his vast knowledge of ancient Sanskrit treatises and his considerable research in the Tantric tradition. Thus this book should exercise the much needed corrective to the wrong understanding that is present in the West regarding tantra yoga and kundalini. Almost always the tantra is identified with sex and it is believed—quite honestly—that with the kundalini awakened one can have God-consciousness and sexual bliss at once.

In a series of cogently argued articles, Gopi Krishna affirms—with sufficient evidence, scientific and other—that there is a reservoir of bio-energy in the human body, only a part of which carries on the diverse activities of the living organism. It is possible by certain techniques of breathing, concentration of will, and conservation of reproductive energies to awaken this normally dormant fund of energy. Released into operation, this power accelerates the evolution of consciousness, brings about important physiological changes, and raises brain-functioning to undreamt of heights of brilliance, intuition, and bliss.

There are, however, warnings. Care must be taken that the bio-energy so freed is not contaminated by impurities—physical or psychological—caused by unrestrained sex indulgence, desires of the animal kind, or other lower movements. A “toxic condition of the bio-energy” can cause serious mental and physical disorder. The writer repeatedly cautions those interested in kundalini against attempting the adventure lightheartedly or without authentic guidance.

Gopi Krishna’s remarks pertaining to the mistaken emphasis on the libido by Freud, the vast difference between the states of consciousness unveiled when the kundalini is awake and the mental conditions induced by drugs, and the necessity of organised research into the phenomenon of the serpent power to expedite development of the mind and heightening of consciousness into the spiritual dimension—are all profound and illuminating.

There is one point, however, on which it is not possible to agree with the contention of the author. He says “an enlightened consciousness is never possible without a biological transformation” and asserts that the brain-mechanism has to undergo a radical change before a diviner consciousness can be embodied. Yogic experience indicates that the process is just the reverse: a change of consciousness is anterior, alterations in the physiological system are a consequence. It is the

consciousness that builds the form and shapes it to its needs. Further, the changes in consciousness effected by the direct descent of the higher consciousness through the head-centre—rather than the ascent of the kundalini from below—must be accounted for. There are lines of yogic discipline—Sahaja Marga for example—in which it is expressly forbidden to go below the centre at the chest level because they do not want to touch the kundalini; and yet they do register changes in consciousness, mental illumination, and spiritual transformation. Kundalini is a great truth, but not the sole or main truth.

Synthesis

Synthesis: The Realization of the Self is a quite new journal devoted to reflecting and promoting the existent worldwide movement toward individual and collective harmonisation—the coming together on different planes of consciousness, in different spheres of life. The editors emphasise the trend in personal life toward integration at a level higher and deeper than the ordinary, surface existence as well as the parallel conscious effort toward a synthesis of interests and aspirations of collectivities. Also in evidence, and encouraged, is the unification of knowledge gained through approaches from different ends—all to accelerate human evolution (and as a consequence the evolution of other species on earth) toward a unified life, horizontal and vertical.

In striving to illuminate these unitive tendencies, *Synthesis* acquaints the reader with the various processes developed and developing globally, and in all ways promotes the working of the Time-Spirit of the age. The first two issues contain, by way of illustration, articles on "The Depersonalization of Sex" by Victor Frankl, "Drive in Living Matter to Perfect Itself" by Albert Szent-Gyorgyi, "The Integral Yoga of Sri Aurobindo" by Alyce Green, "A Higher View of the Man-Woman Problem" by Roberto Assagioli and Claude Servan-Schreiber, and interviews with George Brown and Haridas Chaudhuri just before his passing. In addition there is a regular section, "Psychosynthesis Workbook", which offers practical ideas, techniques, and applications designed to enhance personal development.

Synthesis (published three times a year by the Synthesis Press, 830 Woodside Road, Redwood City, California 94061 U.S.A.; the subscription rate is \$10) is a most welcome venture whose living approach and superb arrangement and production are in keeping with its high level of thought.

M. P. P.

March 1976

FROM SUPERPHYSICS TO ASTROBIOLOGY

Oliver L. Reiser

I. From Greek Atomism to Holistic Electronics

The beginning of what is sometimes termed the "new physics" is dated by the discovery that the supposedly indivisible "atom" of ancient Greek philosophy and early modern chemistry and physics is not in fact simple and indivisible, but as a unit of the material world is a quite complex system which is constituted of negative charges of electricity (electrons) and positive charges (protons) held together by fields of force.

Following upon the discoveries toward the end of the nineteenth century physics—by Marie and Pierre Curie, Sir J. J. Thomson and others—which culminated in the "electron theory", twentieth century physics advanced at a breathtaking pace as it piled discovery on top of discovery. One of the early dividends of the new electrical theory of matter was the recognition that the flow of an electrical current is nothing other than the migration of electrons along the surface of the conductor. The construction of a model (about 1900) to explain the electrical properties of metals was then undertaken by H. A. Lorentz and others. This was a theory of how electrons can detach from atoms and roam about, these migrations occurring in response to applied fields of force.

As originally presented, this model had its limitations—especially when faced with new facts that came to light. Among these, later on, were the phenomena subsumed under the categories of *superconductivity* and *superfluidity*. These novel phenomena defied the explanatory capacities of earlier electron theories. Accordingly an entirely new formulation was called for. This brings us to what may be termed *superphysics*.

Oliver Leslie Reiser passed away in June 1974 at the age of seventy-eight. Professor of philosophy at the University of Pittsburgh for forty years, he developed the system of thought termed "cosmic humanism". Albert Einstein commented that Dr. Reiser "by means of rich and varied knowledge had overcome . . . the paralyzing relativism that so many clear thinkers of our times feel themselves forced to accept, because they have restricted themselves to a purely logical-causal approach". Dr. Reiser's works include The Integration of Human Knowledge, Cosmic Humanism, and Cosmic Humanism and World Unity, as well as many articles in books and periodicals—several of which have appeared in World Union since 1968. This article—provided by his colleague, Robert A. Smith, III—is one of the last papers prepared by Dr. Reiser before his death.

II. Superphysics

Under this rubric we subsume that astonishing set of phenomena that are now covered by the terms "superconductivity" and "superfluidity". Superficially these two categories of phenomena are not the same. However, they are analogous, though on different levels of behavior. At a deeper level of understanding, as we shall see, a synthesis is possible. This, in turn, augurs well for a wider unified theory.

These two classes of phenomena—Gemini twins, as it were—are now objects of intensive research. Some beautiful generalizations are presently available, especially since the formulation of what is termed the *BCS* theory, about which more in a moment.

The superconducting state of matter was discovered by the Dutch physicist, Heike Kamerlingh Onnes, in 1911. The term now refers to the property of some metals, when cooled to a sufficiently low temperature, to carry an electric current without resistance. The phenomenon is illustrated by the fact that if you take a ring of superconductive metal, such as lead, and induce an electric current in it, this current will run of its own accord for weeks or months. This means that certain metals, when cooled to the vicinity of absolute zero (minus 273 degrees Celsius) lose their electrical resistance—the flow of electrical current will continue indefinitely. This remarkable phenomenon was once described as a "ghost current" (not to be confused with the "ghost wave" of wave mechanics). It has been recognized as the "closest thing to perpetual motion" that there is and as such has no counterpart in other domains of physical science.

The discovery of the second fundamental property of "superphysics"—after the discovery of superconductivity by Kamerlingh Onnes—was not long in coming. It was W. Meisner and R. Ochsenfeld who found that such superconductive metals as just referred to would repel outside magnetic fields.¹ This means that if a magnetic material is placed over a superconductor, it will remain suspended there in a state of "levitation". These two sets of phenomena, namely, the abrupt disappearance of resistance to the passage of an electric current and the tendency toward the exclusion of a magnetic field from the interior of the superconductor, thus apparently fulfilled the dreams of these visionaries who sought the goals of perpetual motion and levitation. Prior to that, the dreams of the alchemists for the transmutation of the base metals to gold had already been achieved. So all we need now to turn "magic" into sober science is the discovery of the "philosopher's stone"—the secret of eternal youth.

Some philosophers of science, especially the followers of Buckminster Fuller, are prone to cite these "superphysical" phenomena as examples of what is termed *synergistics*. Here the properties of the whole are more than the mere summations of the properties of the parts. In the older terminology, "synergistic" effects were referred to as "emergent" or "gestalt" effects. But no matter what the label, in the above instance one electron of the metal may pair with another in the superconductor, provided they have the same momentum and speed, with spins in opposite directions. Here the attraction between electrons is greater than the

1. On these matters see the article by Uwe Essman and Hermann Traube, "The Magnetic Structure of Superconductors", *Scientific American* 224 (March 1971): 75.

mutual electrostatic repulsion and this net attraction leads to the pairing that is responsible for the superconductivity. This is a most intriguing phenomenon, especially when, in living systems, this smooth flowing migration of electrons takes place along chains of giant DNA macromolecules. But more of that in a moment. Next let us consider what might be termed subsidiary effects within the more general characterizations.

III. Vortex Behavior in Superconductors

Under certain conditions (i. e., presence of a strong magnetic field) *vortices* exist. In effect, a vortex is a cylindrical hole in a superconducting body. The magnetic flux that passes through a vortex must be quantized. There is no longer any question that quantized vortices do exist in superconductors. This is seen in superfluid helium.² As Fritz London has argued, both superconductivity and superfluidity are macroscopic quantum phenomena. This implies that there are long-range correlations among electrons in superconductors; that is, as just noted, many electrons act in unison.

It is now clear that in superfluid helium, reached when a critical transition temperature has been attained, a vortex can be created, and that this is the response of the electrons in the helium atoms to applied magnetic fields. This is an empirical fact. But the behavior of vortices in superfluid helium raises many questions yet to be answered. How are the vortices created? How do they move? How do they interact with each other? What is the role of the superconductive film in relation to the superposed magnetic field? And for us the important problem: *do we have here an example of the more general phenomenon of a supervenient or organizing force (a "super-current") exercising guidance over inferior micro-forces?* If so, is this control of micro-forces by macro-forces in any way comparable to the intervention of a hyperspace medium in an inferior space matrix? Answers to these questions are still to be found.

IV. The Faces of Helium

Several times we have referred to the unique behavior of helium. It is for this reason that we have previously developed the concept of the Helium Psychosphere. Helium is a strange substance. Above a critical temperature it is helium I; but liquid helium, cooled to 2.2 degrees above absolute zero, flows without friction and is designated as helium II. For this reason I once proposed that it be baptized *Evelium*. According to the "two-fluid" model of liquid helium, there are two fluids which can move independently of each other; that is, helium II has a superfluid type of motion and can flow without friction and exhibit superfluid vortices and "second sound waves" (to distinguish them from ordinary acoustic waves). The thermal waves which are transmitted are called "phonons", this time by analogy with photons of light radiation.

Helium can exist as a gas, a liquid, or a solid. Solid helium is obtained by compression of liquid helium as liquified by cryogenic methods. Superfluid helium, whether solid

2. Cf.: F. Reif, "Quantized Vortex Rings in Superfluid Helium", *Scientific American* (December 1961); and, R. D. Parks, "Quantum Effects in Superconductors", *Scientific American* 213 (October 1965): 57.

or liquid, exhibits the "second sound waves" mentioned above; but solid helium thus far is the only solid in which these waves have been observed to occur.³

Now for the next step.

V. Superconductors and Helicons

The story we are here recounting is quite amazing. Some of it bears repetition. We have seen that whereas an electron at one point in a metal moves independently of another electron at some other point, in a superconductive state the motions are correlated. This is illustrated by a superconducting ring where electrons are forced to rotate around the lines of force of a magnetic field.

In solid state physics the waves trace a spiral path, and this wave motion is termed a *helicon*. In solid state plasmas---and plasmas are found everywhere in nature, in solids, liquids and gases---the curling of conduction electron trajectories into cyclotron orbits is accompanied by resonances that have their harmonics.⁴ When we turn to the "semiconductors" with crystal lattices, these novel developments take on a special significance for us, especially when information that is transmitted as a helicon film begins to resemble the DNA double helix of biology---an example of a kind of "information bearing crystallinity", to employ the language of Professor P. W. Anderson.⁵ This, we propose, prefigures a fundamental phenomenon of living systems.

VI. "Broken Symmetry" and the BCS Theory

From the viewpoint of Cosmic Humanism one item of philosophical consequence in the discoveries about superfluidity and superconductivity is that they call attention to the fact that there are levels of action patterns, in this instance the level of internal particle behavior and the level of whole structures---there is a "broken symmetry" of holism of synthesis. This type of "transcendence" is embodied in what is termed the *BCS* theory. The theory already has many impressive achievements to its credit, so much so that in 1972 the Nobel prize in physics was jointly shared by John Bardeen, Leon N. Cooper and John R. Schieffers for their cooperative development of the theory of superconductivity (now therefore designated as the *BCS* theory).

This theory has had an impact on ideas in fields as diverse as nuclear structure, quantum mechanics applied on a macroscopic scale, crystal lattice structure, solid state physics (e.g., transistors), the amazing behavior of liquid helium at low temperature, in astrophysics relative to the liquid cores of neutron stars, and in the "Josephson effect", where we have two superconductors separated by a thin conjunction. This last phenomenon, dealing with macroscopic quantum phenomena, is also observed in the behavior of atoms in superfluid liquid helium, which is now understood in terms of wave functions of electrons in super-

3. Cf.: Bernard Bertram and David J. Sandiford, " 'Second' Sound in Solid Helium", *Scientific American* 222 (May 1970): 92-101.

4. Cf.: W. M. Walsh, Jr., "Magnetic Resonance and Waves in Metals", *Science* 117 (1971): 38-42.

5. Cf.: P. W. Anderson, "More is Different", *Science* 177 (1972): 393-396.

conductors. This deserves another word.

Dr. Brian Josephson, while still a graduate student at Cambridge University, established the fact that pairs of electrons can "tunnel" through an electrical insulator if the insulator is thin enough and layered between two superconductors. This Josephson effect, as it was designated, has wide applications in laboratory measuring devices. Also it is now clear that the effect can be adapted to computers that will function at normal temperatures, and this will help in designing high-speed electronic brains for our high-speed electronic civilization. It is important to note that Josephson's work is an application of BCS assumptions concerning superconductivity. *Homo Electronicus* is on his way, and after he arrives—*Ad Astral*

VII. The Conceptual Synthesis

The conceptual synthesis of superfluidity and superconductivity—treating them as parts of a unified doctrine—was made possible when both were thought of in macroscopic terms as manifestations of matter waves.⁶

As we have seen, superconductivity represents the frictionless flow of electric charges, while superfluidity represents the frictionless flow of matter—both representing the behavior of matter as postulated by quantum mechanics on the subatomic and atomic levels. To achieve this unification, it is necessary to utilize matter-wave fields, on these levels, as they (the charges and particles) attain coherence in terms of amplitudes, frequencies, phase relations and direction of the matter-wave fields. For us, of course, on a still higher level, the non-linear quantum mechanical sequences should throw light on the biological basis of consciousness in living systems. This provides us with the next step in the movement toward the emerging synthesesystem.

VIII. From Holistic Physics to Holistic Biology

We have already made the point that when the new phenomena of superconductivity and superfluidity were discovered, modifications of physical theory were called for. This is especially the case when attention was directed to the higher level of the field of optically active molecules which contained electrons that were coerced into helical paths by electrical fields.⁷ Here again holistic ways of thinking turned out to be helpful. A kind of preparation for this new viewpoint was provided when it was noted that when a superconducting ring with a current flowing through it is cut, the structure as a whole loses its properties. This holistic functioning of the ring previews the nature of a living system in its wholeness, except that the living organism is sometimes able to repair the damage to its structure when the inorganic analogue (ring) is not. A "life field" seems to enter as a superior organizing force.

For us these developments have an added interest, for as we now know, investigations have indicated that a properly conceived molecule can function as a superconductor if

6. Cf.: The editorial, "Coherent Matter Waves", *Scientific American* 212 (June 1965): 61.

7. Cf.: T. H. Geballe, "New Superconductors", *Scientific American* 225 (November 1971): 22-30; see also, F. Hoyle and J. V. Naliker, "Cosmology and Quantum Electrodynamics", *Nature* 219 (1968): 339-341.

there is "an interaction between positive charges oscillating in side chains and electrons moving along the spine of the molecule".⁸ All this seems to border on the esoteric and the occult. The total range of developments is so remarkable as to justify our term *superphysics*.

It is certainly evident by this time that the developments that are taking place in the "new new physics" are opening up novel patterns of ideas in biology and psychology. The examples we have surveyed of the holistic viewpoints in physics amply support the expectation that analogous modes of thought in the field of psychic phenomena will soon be forthcoming. Even now research is in progress which is moving from "Solid State Physics" to "Solid State Biology".⁹ Most important for us, the above properties of "superphysics" as embodied in the DNA helix will function in the morphogenesis of *Cosmic Man*, as I shall seek to show as the argument proceeds.

One of our inescapable assignments is to show how these newly emerging ideas, coupled with concepts of hyperspace influences, can be integrated with the forces of toroidal vortices, and perhaps even circumversions of pyramid energies, to yield an understanding of how nature can transform nucleic acids in the space between the sun and the earth into the DNA helices that enter the earth fluid (ocean) medium in the form of simple living organisms. In some manner we must visualize how the Cosmic Lens focuses the flow of field energy into the double helix spiral with the 3-D Yin-Yang pattern in the vortex, as pictured on the left in Diagram III (page 14).¹⁰

The field energy we refer to as coming from extraterrestrial sources is carried by the helical component of the magnetic field of the spiral arm of the galaxy, at least in the region of the sun. I have no information on the metagalactic energies, but of course there are intergalactic fields. Then, closer to home, there is the field of the solar wind, and here, too, we have a spiral configuration. The solar wind is a plasma spiral consisting of highly ionized particles, negative electrons and positive protons. As we have indicated, plasmas exist in solid, liquid and gaseous states and are under the control of electric and magnetic fields subject to a variety of wave manifestations that include the toroidal motions we invoke in the vortices of the Life Lens (see Diagram I). Our diagram already indicates that electrons and protons enter into the composition of the solar wind. But beyond that, there is evidence that high energy electrons and protons issue from a pulsar in the Crab nebula.¹¹

8. See the editorial, *Scientific American* 211 (August 1964).

9. See the article by that title in *Physics Today* 24 (1971): 15.

10. This diagram of the 3-D Yin-Yang vortex pattern is one of several sent me by Miss Roseann Millin of the Canadian Institute of Psychosynthesis. She describes it as an archetypal image which pictures the movement of psychic energy as it flows through a 3-D double helix with a Yin-Yang pattern in the vortex. I believe that image can be related to my own picture of the toroidal circumversion vortex I have called the Life Lens. Miss Millin's diagram is published with her permission and that of the institute.

11. Cf.: "Physics and Astronomy in 1972 (Summary)", *Science* 179 (1973): 67.

If these both are examples of the Yin (electrons) and Yang (protons), we do indeed have the complementarity of the *I Ching* philosophy.

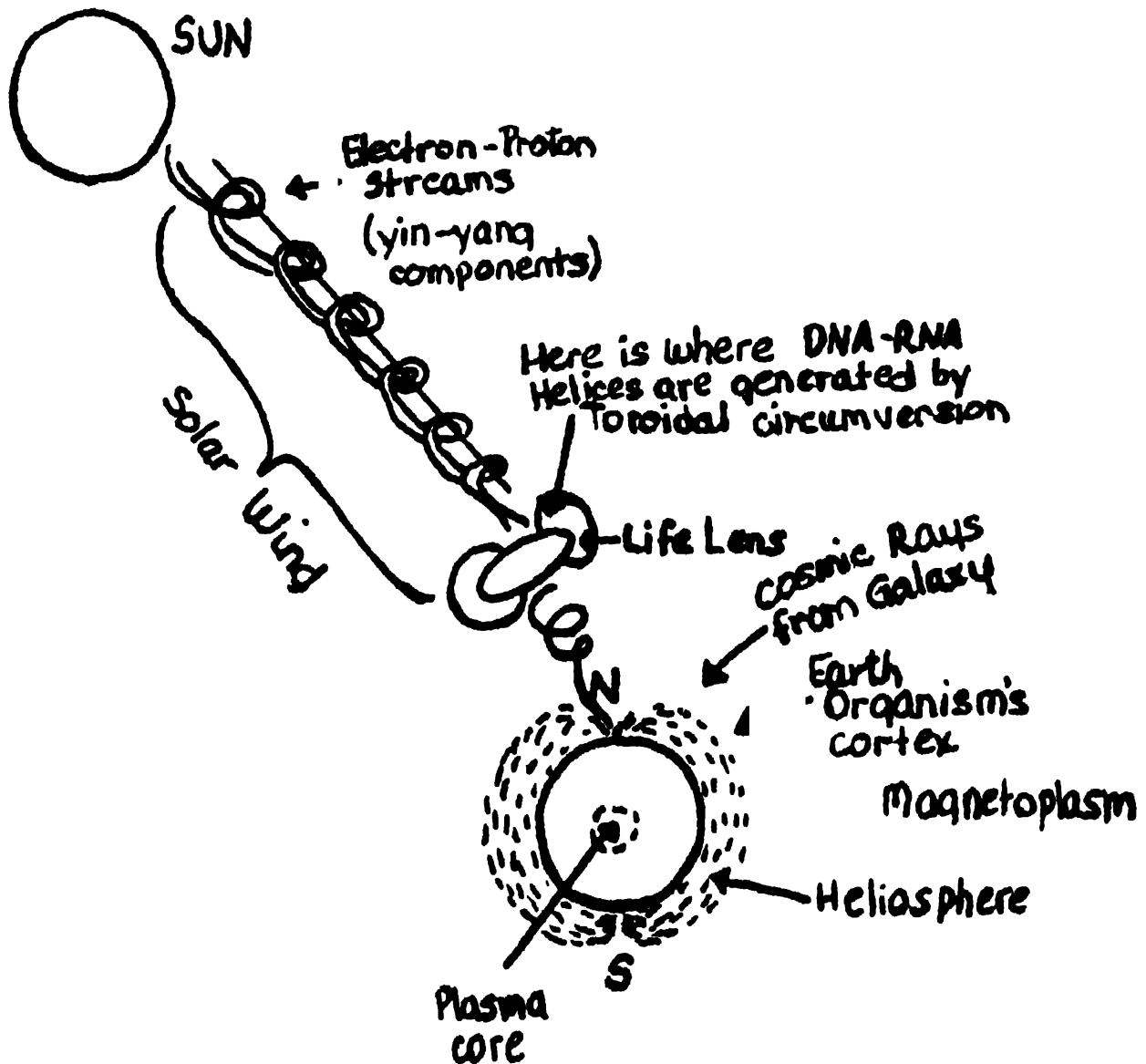


DIAGRAM I
SUN-EARTH-ORGANISM HOOK-UP

Of course, when we consider the role of electric and magnetic fields of force in biomagnetism—and this for us includes "orgone energy" and "bioplasma"—we realize that relative to life on earth this brings in the role of the iron-nickel core at the center of the earth. It also brings in the role of hydrogen and, further out, the role of helium in life and mind patterns. We have constantly stressed the role of the hydrogen bond in what

has been called "cooperative phenomena" as something to be reckoned with in organic and inorganic systems.

Another example of such "cooperative phenomena", but in a wider context, is illustrated by the presence of the ferromagnetic grains in interstellar space which not only have to do with the polarization of starlight but also, as a consequence, with biological phenomena. For the physical scientist the metals-to-hydrogen ratio may only be an example of the fact of nucleosynthesis; but for Cosmic Humanism the philosophical implication is that we have here evidence of a telic (orthosynthesis) factor in cosmic integration.

Returning to the topic of the role of hydrogen, we recall that Andrija Puharich considers that the vehicle of information transmission resides in the proton and the nucleus of the hydrogen atom. The proton—treated both as particle and a wave-system—functions in the brain like a three-dimensional pattern entering into resonance with other proton waves.¹² Accordingly the brain appears to Dr. Puharich as an integrative set of interference patterns of waves generated by proton precession frequencies. The theory assumes that the protons serve as the universal bearers of information in the sense that "information" is encoded in quantum magnetic and electrodynamic resonances. This means that proton-proton bonds of harmonic reactions emerge in mind because consciousness and brain wave states—such as the alpha frequency—are synchronized or locked into phase in some manner. Indeed the globe's geodynamic capacitor is strangely like the brain capacitor, in frequency range at least.

Dr. Puharich's ingenious theory is highly speculative. But I doubt that we should think of "biological information" as being carried by single (or coupled) protons, since information, like "temperature" is not a function of single entities; they are results of interactions of entities of statistical ensembles. The "interference waves" that arise from cortical patterns are, I believe, manifestations of holographic images that emerge on the molecular level, not atomic. Protein molecules thus are the constituents of gene helix syntheses and also the source of cortical gestalt processes such as holistic brain states.

IX. The Mind-Matter Complementarity

The mind-matter cinerama is captivating. There seemingly are various possible versions of the nexus. Professor Keith Floyd, a psychologist interested in brain physiology, has suggested to me that the midbrain, posterior to the optic chiasm, may be the locus for the holographic plate that functions as the "screen" of human consciousness where perceptions are registered and in which memory images are stored for retrieval processes. In this scheme, he proposes, it would be possible for the thalamus to radiate neural energy to opposing cerebral hemispheres and serve also as the locale of brain waves and the source of the scanning mechanism. For Professor Floyd the pineal body occupies a midpoint for energy fields of opposing spirals of a "double double helix", where conscious mind emerges as the locale of brain waves that appear in sequential, spheroid "bursts of light", as it were.

12. The material in this section is abstracted from the paper of Dr. Andrija Puharich titled "Protocommunication" presented at the Twentieth International Conference of the Parapsychology Foundation at St. Paul de Vence, France, on August 27, 1971.

My collaborator even seeks to fit the Cosmic Lens into the organism through a window opening up to the psi-layer enveloping the globe somewhat like Teilhard de Chardin's *noosphere*!

In the spirit of such synoptic vision, let me close with a restatement of how this fits into the Hierarchical Cosmos.

X. The Hierarchical Cosmos

Those who have some familiarity with the philosophy of Cosmic Humanism know that this speculative synthesis is presented as a hierarchical system—it is pictured as an eight-dimensional cosmology that rises in levels of inclusions and perfusions of the "lower" by the "higher". The difficulties confronting this system have been recognized and dealt with so far as possible.

It is admitted that aside from occasional glances at the virtues of a hierarchical cosmology by Gerard de Vaucouleurs and the statement of some seemingly parallel ideas by Dr. John A. Wheeler in his theory of "superspace" and "connecting universes", there has been little defense of this cosmoconception. Now, however, we find Professor Thomas Gold seriously considering the properties of a closed or nearly closed universe in which "sub-universes" may exist. In his article, "Multiple Universes", Professor Gold refers to "clusters of galaxies" and "patterns of quasars" as providing possible evidence for his view.¹³ Some mathematical support for the idea may also be found in the role of "singularities" in general relativity theory. The point that I would want to make apropos this problem is that, so far as I can see, whether (a) we regard the present universe (the one we live in) as having "sub-universes", or whether (b) we regard our universe as a "sub-universe" in a much vaster eight-dimensional hierarchical cosmos is a matter of how one focuses his vision.

In my own most recent cogitations I have been experimenting mentally with the idea that these higher dimensional universes may be related to Dr. Wilhelm Reich's *Cosmic Superimposition* (see his fascinating diagrams in his book by that title). This homomorphism could be made more plausible if the four dimensions of the space-time manifold of relativity theory could be regarded as being made "manifest" through mirrored superimposition. That is to say, the successive levels of depth (height) *seem* to be such because we are observing them "from this side" (linearly) and failing to realize that the successive levels of the paradigm for the symmetrical eight-dimensional cosmos are reflections of a mirroring by our own minds. What kinds of frequencies would be required by what kinds of fields or plasmas for such laserlike holography is a problem I have not studied.

But the possibilities of this cosmoconception need to be explored. It may be that this cannot be done by inventing better telescopes to "look" farther out into supergalactic spaces (a la Allan R. Sandage's space probes via quasar distances), but by looking into the depths of one's own inner being. A diagram of this cosmology was provided some while back in *Cosmic Humanism* (see Diagram II) and this may now take on additional value. Be that as it may, we Cosmic Humanists still aspire to climb the Jacob's ladder of the hierarchy.

13. Thomas Gold. "Multiple Universes", *Nature* 242 (1973): 24-25.

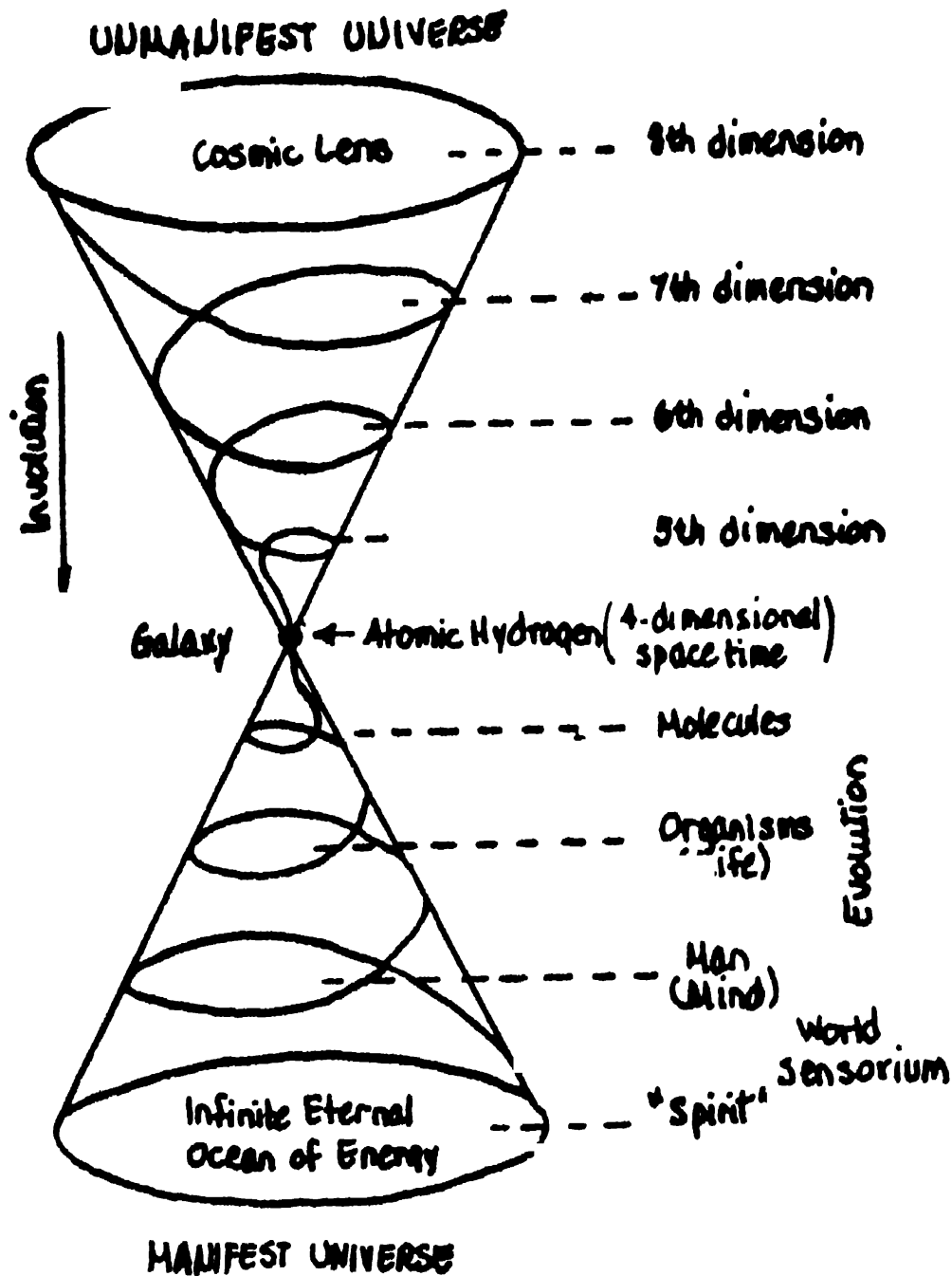


DIAGRAM II

Further reflection on this cinerama suggests the thought that, to complete the picture, we must superimpose the previously noted Yin-Yang picture and its mirror image in our Diagram II of the Cyclic-Creative Cosmology. As Keith Floyd has pointed out to me, with

this superimposition we see the double double helix manifesting itself (Diagram III).

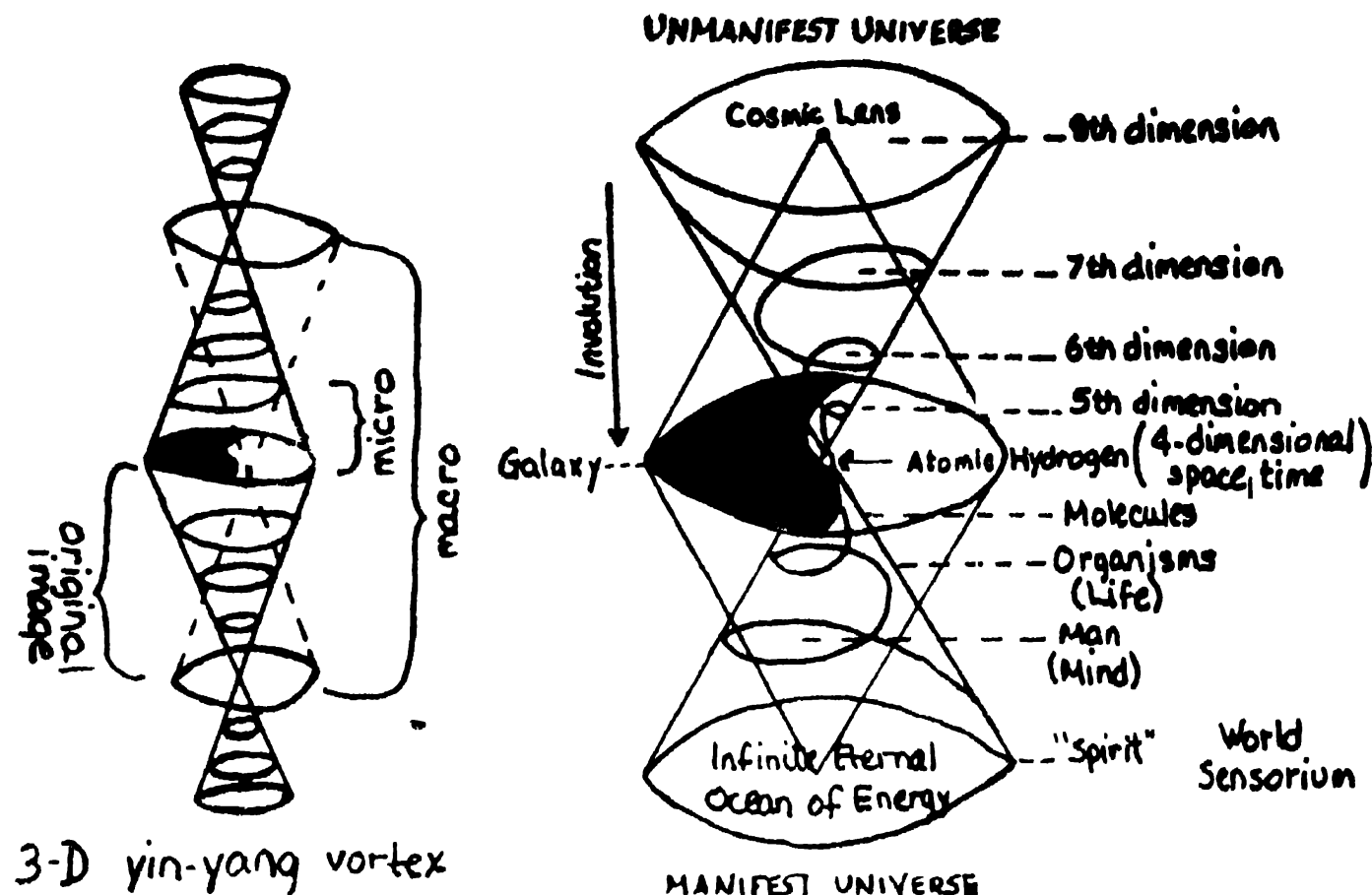


DIAGRAM III
THE CYCLIC-CREATIVE COSMOLOGY

It requires eight dimensions to make the Cosmos: (a) *four* in the Manifest Universe of material systems evolving toward higher rungs on the ladder of emergence, and (b) *four* in the Unmanifest Universe which provides the invisible guiding fields (archetypes) for emergence. There is a symmetry between the two universes, i.e., they interpenetrate and each has its complementary or folded-over image in the other universe. This provides the basis for what Jung terms *synchronicity*.

With this superimposition we have at one and the same time a spiraling in and a spiraling out as a single simultaneous process. This recalls Evelyn Underhill's thesis in her book on *Mysticism*, where she speaks of *two modes of mystical consciousness as a spiraling in and a spiraling out*. But note that in our mental image these two are not "two". Observe also that at the central apex point we confirm Meister Eckhart's intuition that the eye with which I see God is the same eye with which God sees me. Here there are no longer two eyes (lenses?); there is only one *seeing* in the mysticism of the Pantheist—only *One Being*. The two spirals are circumversible and in a trice the one is seen as the other—no *split*, no *interface* any longer. The Cosmic Lens becomes a "zoomlens" and the same goes for

consciousness—both reaching simultaneously for each other. At that point of meeting, Cosmic Humanism is transmuted into Cosmotheism. See Diagram IV for a cinerama of this cosmic cycle.

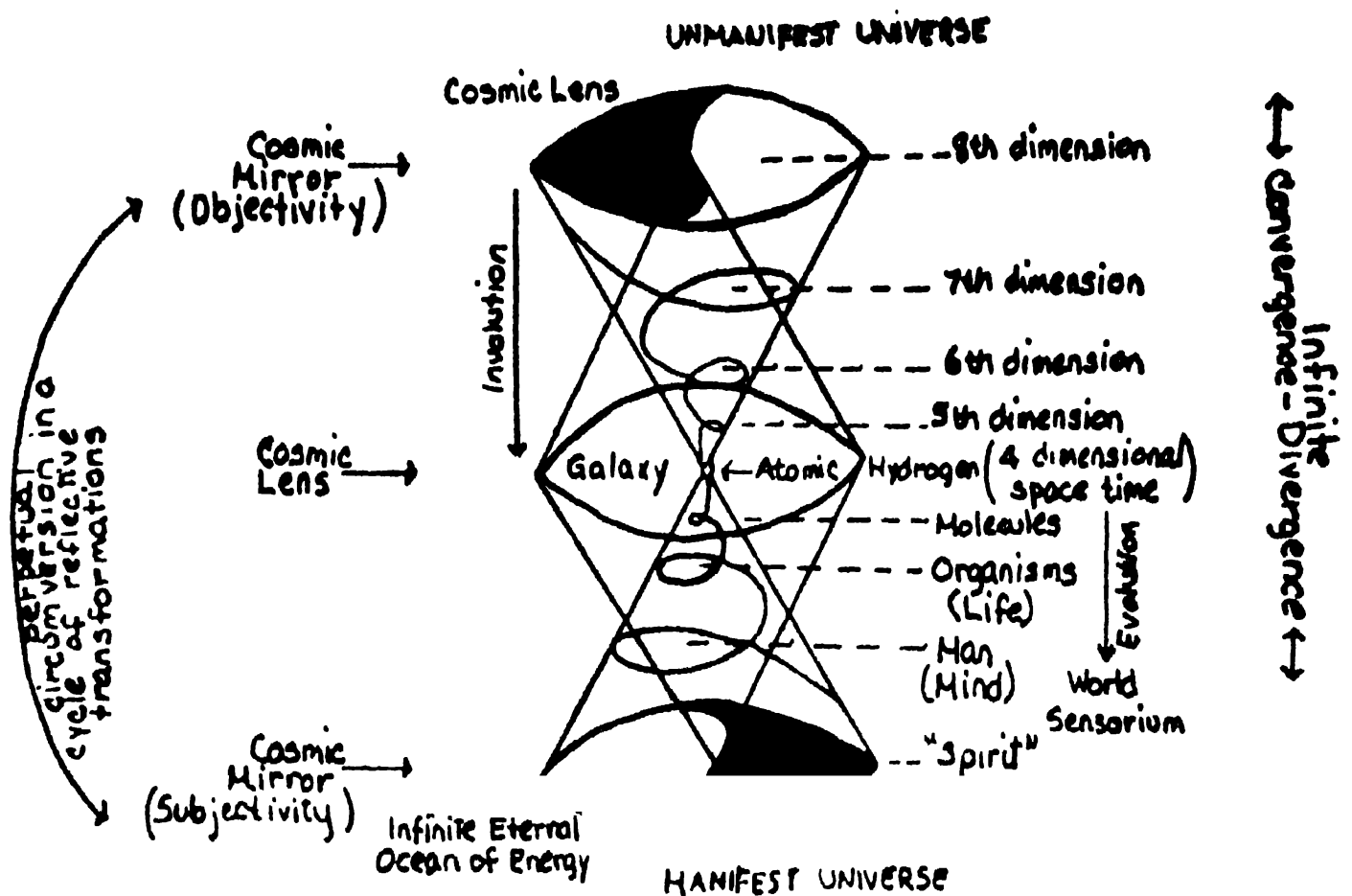


DIAGRAM IV
AN ALTERNATE PICTURE

An alternative picturization of this cosmoconception appears in the above Diagram. In this projection the Cosmic Lens can zoom in on either apex, in either direction. Our "ordinary" state of consciousness is but our habitual fixated adjustment of the zoom lens on the mirror that appears to us as "objective" and which we interpret as the "material world". But if we focus on both apexes in both directions at once, we invoke the state of consciousness that is variously known as 'enlightenment', "satori", "samadhi", and so forth.

Is it possible that in this case the lens brings itself into focus as it focuses upon itself? Can it be that the cerebral lobes, viewed "sidewise", can be envisaged as a brain functioning so that the microcosm mirrors the macrocosm?

XI. Cosmic Humanism's Unfinished Symphony

It is quite obvious that a number of problems in the development of the philosophy of

Cosmic Humanism are still unresolved. Some critics may urge that the present cosmology raises more questions than it answers. But of course the same could be said of contemporary astrophysics and cosmogony. However that may be, here are some of the gaps that still remain in the present synthesystem.

1. If Cosmic Humanism is irrevocably committed to a cosmos of eight dimensions, how is it possible to "round the curve of dimensions" whereby the human thinker, no less than the multidimensional cosmos itself, escalates and de-escalates from one dimension to the next? This is a problem on the level of thought and on the ontological (existential) levels from *physics* to *biology* to *psychic sciences*.

I can only say here that some part of the mathematics of hyperspace thinking and differential geometry has already been presented in my earlier book, *The Integration of Human Knowledge* (Chapter X), and in *Cosmic Humanism* (Chapter XIII). More will be offered in my subsequent publications.

2. Does not your view presuppose the truth of the now discarded Lamarckian doctrine of the "inheritance of acquired characteristics"? The reply is that if you employ the traditional two-valued Aristotelian mode of thought, we are trapped by the dualism of "heredity" and "environment"—an inner-outer dichotomy which invalidates the kind of synthesystem that *Cosmic Humanism* aspires to. But long ago, indeed as far back as my book, *The Promise of Scientific Humanism* (1940), I discussed this problem of Lamarckian inheritance versus the opposite doctrine of the "continuity of the germ plasm" of A. Weismann and indicated the non-Aristotelian way to an escape from this Hegelian opposition of heredity (thesis) versus environment (antithesis). We proposed a transcendence of the thesis-antithesis conflict into the synthesis provided by the doctrine of "parallel induction", as this was outlined in my book, *The Promise of Scientific Humanism* (pp. 199-202). In the non-Aristotelian mode of thinking this interface of "inner" and "outer" does not necessitate the either-or disjunction of the two-valued logic. The same point of view has been set forth in *Cosmic Humanism* (pp. 54-71). It is interesting to note that Arthur Koestler has dealt with the view of Paul Kammerer whose biological doctrine rested upon Lamarckian foundations. Koestler's reopening of the problem in his book, *The Case of the Midwife Toad*, should help to fortify the present view.

3. How can thought patterns—the mental guiding fields of human beings—causally influence the morphogenetic field of your postulated Life Lens somewhere out in space, between the sun and the earth? I can only reaffirm the answer which, hopefully, will become more convincing with the passage of time.

The mechanism for the creation, embryogenesis and evolution of living forms is what has been described as the "Great Experiment". In one of my more recent publications, *Cosmic Humanism*, the projected mental field was pictured as an involvement of a circumversion by a toroidal vortex of field energy via the Life Lens. In this latest unfoldment, I am now seeking to utilize Roseann Millin's "archetypal image of the 3-D double helix with the Yin-Yang pattern in the vortex". This image was pictured in Diagram III. In a moment I shall take another step toward integrating this into the toroidal vortex of the Life Lens. This brings us to the next movement of the unfinished symphony.

4. How do you propose to give substantive content to your beautifully vague phrase, "discover and utilize the laws of harmonic synthesis" whereby, as you put it, "we convert the power of resonant thought into a guiding field for the emergence of the Psychosphere"? The answer at this point seems to reside, in part at least, in the anticipated progress in the field of psychical research. My article, "The Psychosphere: A Holistic View of Psychic Phenomena", appearing in the symposium volume, *Psychic Exploration: A Challenge to Science* (by Edgar D. Mitchell), should help to clarify and strengthen the present point of view. Prior to that, however, much preliminary groundwork for the coming development has already been provided in my earlier book, *Nature, Man and God* (1951) and in *Cosmic Humanism*. This proposed development has always been described as the "Great Experiment", and we have hitherto elaborated the theory in terms of hyperspace notions. Now, in this present volume, the "experiment" is pictured as requiring the mirrored visualization of "man's new image of man"—a lasered collective human thought-form which, with the help of the Psychospheric feedback through a toroidal vortex, will focus the energy field that will guide the holography of the coming Cosmic Man.

THE BIPOLAR BODY POLITIC

I

The Bipolar Body Politic
is not bifurcated
by any means
at all.
If anything
(at all)
it is bilocated
or else bifocaled,
centered in one place—
the body incarnate,
that house and home
of pelvic bone
and cerebral crown:
those polemicists
that apologize and argu-ment
for dominance
and di-rection
unless joined in will
with gravity's force,
effecting smoother gyrations
and balance in movement
toward unified purpose
and sensibly reasonable
and reasonably sensible
action.

II

The base of public
stems from roots of private:
corporeal
material
organic
genetic
organismic

historic
evolutionary
energetic.
While private digs in and,
synonymously, reaches back,
life moves the past
up from newer soil,
never touched,
into root canals
for travel
on up and out the stem
to branch anew
in reaches
wholly original
though preceded
a million times
over a million.

III

The past is key
to future openings;
it reaches back,
it burrows down
in driving fashion,
to where it's never
been before—
there lies the future:
in the past:
below,
beneath,
down under
the roots,
untouched by creeping tendrils.
Future hides wide-open,
accessible to past performance

based on infinitesimal
 selections and rejections
 of granule and clod,
 sifting each within the path,
 testing and feeding,
 excreting what does not fit
 within framework and form.
 Future functions as seedbed for past,
 as space for past to move in present time.
 Future, however, also hangs out and over,
 up above the down under
 where it also lies
 to complete an imaginary circle
 around the past
 and the insignificant but useful present.
 Future contains past
 as inside is circumscribed
 by circumference,
 as sphere is enwrapped by
 imaginary surface.
 At center is the present,
 an equidistant location
 from all defined outermost points:
 "a place", so called,
 no more arbitrary
 than the predictable "point".
 The present is a referent that points to,
 is a locus that places,
 the past in its movement toward future.

IV

(Somehow—
 a big IF,
 but somehow—
 the past knows where to go
 and, when it gets there,
 it knows what to do—
 because it's already been there before—
 as demonstrated by its selective fittings.
 The past seems to know the future
 ahead of time
 because of its ability to recognize the future

when it arrives there
 in the present form of the past.
 Most simply stated,
 the future is known
 in its proper place of being recognized
 which place is, of course,
 the present.)

V

The present,
 while insignificant but useful
 when considering things more significant,
 is important as it is
 the channel or canal or core
 where past and future flow,
 where life has a place to move,
 where time readjusts to its new proportions,
 where dimensions take new shape,
 where polarities balance out,
 juggle for time and space,
 dance back and forth
 (one foot to the next)
 energize into synergy,
 where Politic incorporates with Incarnate,
 takes on a new body,
 walks unified as a body,
 performs as a body:
 wholistic
 organismic
 simplistic
 systemically rooted
 in the species
 the earth
 the solar-lunar bit
 the galaxy trip
 the universe itself.

VI

Body Politic
 heal
 as you already
 know how

to heal.
What you should become
is no mystery,
no futuristic shadow.
You already are!
 Bipolar Body Politic
is what you are
because you do it best
since you already know how
(although you try to hide what
you know you are doing now).

Private and Public
Past and Future
Pelvis and Skull-bone
 seem to be your
 Poles.

But those
poles
axes
spindles

central stem with root and bloom
are all connected
by the core
 the channel
 the canal
that is
 Central
 to your
 Movement
 to your
 Life.
Move from there. . . .
 Live in that place.
Reach out from there. . . .
 Occupy new space.
Step forward in cadence. . . .
 Follow where you are already being led:
Hooked on a life-line. . . .
 You know how you are fed.

Timothy M. Riordan

Dr. Timothy M. Riordan is an assistant professor in the Department of Education at Xavier University, Cincinnati. This poem was inspired by the work of Pierre Teilhard de Chardin.

THE MYSTICISM OF THEODORE DREISER

Desmond Tarrant

If man is free, so is all matter.

Theodore Dreiser

Theodore Dreiser was born in 1871 in Terre Haute, Indiana, to become, first, one of a large and impoverished family, and, finally, one of the great figures of his age. While his tendency to worry and anxiety which dogged him all his life, may have been inherited from his Roman Catholic father, a weaver from Germany, the seeds of his ultimately mystic insight were probably sown by his mother.

The haunting mother image plays over a great deal of his work. Her parents were of Pennsylvania Dutch origin closely connected with the soil, religious, thrifty and industrious.

Dreiser described the "strange, sweet, magnetic, dreamy soul" of his mother, Sarah Dreiser, seeing her as beyond good and evil, essentially amoral. She possessed the great gift of enduring suffering and loving abundantly,

A British writer and teacher of English and American literature, Desmond Tarrant is the author of a book-length study of James Branch Cabell. He has written numerous articles for scholarly and scientific journals "to try to contribute directly to a new emergent synthesis concerning man's place in the universe".

an archetypal earthy fertility symbol, the renewal of which Dreiser searched for all his life. She went into *Jennie Gerhardt*, and much of her nature was in Dreiser himself. It was this that made him aware of all colours of the spectrum of human experience, and took him deeply into all aspects of American life - a life that was becoming the most material on earth. The example of the mother was to give Dreiser his own sympathy and tenderness, which enabled him to write in *Ainslee's Magazine* in 1898, "Great is the art of analysis, for it sits in judgement upon the heart."

The ability to recognise this little fact objectively took Dreiser beyond the confines of his age of analysis to an area of profound mystic comprehension; but it was to be a long time before this flowered, and the intervening years were, for him, ones of chaos and confusion.

We shall attempt here in brief to trace the development of his thought—so representative of his time—in more detail.

Dreiser's credos were defined in *The Bookman* and *The Forum* in 1928 and 1929; they show the thought behind the novels, *Sister Carrie* (1900), *Jennie Gerhardt* (1911), *The Financier* (1912), *The Genius* (1915) and *An American Tragedy* (1925),

prior to the final phase of his development.

To begin with, Dreiser acknowledges a basic impulse to know why we are here, and he was constantly pursued by this question. At this time, he saw life as driven by a will-less mechanism, "a blind and yet deathless energy possessed of most amazing powers and attributes but not of intelligible intention". This was the nadir of nihilism and culminated in the crash of 1929 as the whole age on both sides of the Atlantic represented drift and abandon.

Dreiser saw an alleged Creator or a blind mechanism. Life amounted to "innumerable selfish, self-centred and cruel organisms" who exist only at the expense of each other, masquerading and betraying. He saw no love anywhere, not even in himself, sex merely the means of perpetuating the species. He delved ever deeper into the scientific how of life, leaving to one side for a time the religious why.

However, Dreiser's sense of mystery and beauty were eventually to take him beyond this. Einstein had seen this same mystery and had noted that, coupled with fear, it led to religion and wisdom.

That Dreiser had little awareness yet of mysticism may be seen by his comparison of man to Buddha gazing "in wonder and astonishment upon the wholly inexplicable world about him". At this stage, Dreiser could see only the futility of an office worker in a shabby suit or a multimillionaire combining twenty minor banks into one large one. The pleasure instinct was the chief one and promiscuous sex its form as he himself sought bodily satisfaction along with his science.

Yet, he had the means to further development in his emotional reactions to: "a girl arms akimbo, gazing at the sky at dawn. A sea a-shimmer in the sun. A beautiful gray

rain amid the drooping leaves of the year. A seamed and weary face bent low in sorrow." Confronted with these objects, Dreiser "was flooded with happiness" and could face a universe which seemed to him to know nothing of kindness, pity, or wisdom.

Instead of working upwards from this reality, as he was to do later, Dreiser spent many years in analysis, and in acting politically and socially. He saw no more point to life than conflict for a small amount of pleasure but, painfully and slowly, he was to clarify his notions of Beauty as symmetry. In 1929, he defined the starting point when he wrote that Life "can and does achieve an aesthetic whole—beauty no less—and via the same elements that are in lice and bedbugs as well as . . . in Shelley and Christ". He recommended examination through a lens, as science still dominated his enquiries at this time, when he said that life comprised inscrutable forces which could be painted only for entertainment, that insignificant man's life was wholly meaningless, and that he saw no meaning in anything and passed quite as he came "confused and dismayed". This is the articulated core of the tide of social misery, fear, want, and destruction that was sweeping the world at that time.

But Dreiser also defined an "exquisite moment of pulsating relationship with the whole of creation, and with all space and time: As in a great cry of elation, As in a great sob of misery or sigh of indifference, or contest, You, I, All things—To what future? In what forever?" Here were the seeds of a coordination which were finally to give him his mystic insight or understanding as the philosophy of Herbert Spencer led him through disintegration to reintegration in the inevitable ebb and flow of psychic energy within his own lifetime.

During the fifteen years from 1930 until his death in December 1945, aged 74, Theodore Dreiser's thinking followed two main lines of development. One became externally interwoven with topical matters, social and political; the other led him inwards, finally to the well of the water of life in the garden of mystic comprehension.

The outcome was that he became a communist (although claiming complete freedom of thought and speech), a member of a proudly godless organisation, at the precise time when he was in his most religious frame of mind. During these years, in the thirties, he fought hard for individual liberties and for negroes, heading the National Committee for the Defence of Political Prisoners (with Lincoln Steffens and Edmund Wilson) and opposing political persecution and violence in the coal fields of Kentucky with John Dos Passos. He opposed Franco and persuaded F. D. Roosevelt to send aid to Spain. In America he was not encouraging revolution but reforms making it unnecessary.

But the route to the largest understanding of Dreiser's personal development is through his internal development. This took the form of a bridge from his scientific interests to his relations with everything created, comprising a scientifically-founded mystic awareness involving both head and heart in a Wordsworthian state in which is heard the still, sad music of the universe.

Previously, Dreiser had so read Spencer's philosophy that it had shattered and confused him by leaving him prone to a blind mechanical universe. Now, however, he fastened on Spencer's concept of immanence, the dwelling of the Creator within everything created. Thus, in *The Myth of Individuality* (1934), Dreiser could write that it is not man who is living, but the race or races, that man is

being lived by a force needing billions like him to express itself. He now refers to a universal mind embodying all in oneness. To express his reverence of Nature's ingenuity he quotes Emerson's *Brahma* joining hands with the previous age of integration and spiritual comprehension as he begins to go beyond his own time.

Dreiser's development from narrow empirical enquiries to a larger religious comprehension may be seen in his introduction to *The Living Thoughts of Thoreau* (1939), published six years before his death.

He starts by reviewing the scope and development of philosophy from early Greece to his time, noting how science concentrates on *how* and philosophy and art on *why*. He observes that God is a word often used to describe Spirit, Brahma, Divine Essence, or Force, all expressing an "imaginary something", conforming to laws or "the essence or spirit otherwise assumed to inhabit or inform them". This is in accord with the Hindu concept whereby Force derives from Spirit, and during a process of change is reconverted into evolved Spirit. The evolution, the greater refinement and complexity, is presumably the object of the exercise, the justification of the whole business, including the suffering.

This idea of a continuing process of evolution here and/or elsewhere is continually presented in Dreiser's selection of Thoreau's thoughts where all the later scientific findings of such an anthropology and psychology are projected to their natural conclusion by mystical and imaginative observation: including the idea of the "immanent creativity of nature", the concept that there are infinitely higher planes of life than exist here, and that poetry *is* all we do not know while most science but mimics it feebly at a distance. Dreiser concludes that if what is made can

be creative and have a sense of purpose, so then can what made it.

Dreiser mentions on the basis of life being electrical—matter being only patterned energy as we would now say—the imaginative idea that is increasingly in the air, of man as a televised substance in a gigantic infinitely complex television programme. He refers to man “powered as a chemical and physical contrivance of external forces . . . responding to and synthesizing these in-pouring and down-pouring stimuli . . .”

He assumes that it could all be the work of a superior force in the matter-energy-space-time continuum; something inhabiting and directing what everywhere appears to be directed matter-energy; something—i.e. God—planning what it all does. This is his syncretism, his union of science and mysticism, of mind and emotion as he transcended his age by his imagination.

What Dreiser liked about Thoreau was that Thoreau's insight was rooted not in prejudiced dogma but in a clear, realistic, objective vision of the thing seen, the intermediary being “a gifted, almost telepathic, sensory reaction” as Thoreau seemed to tap “some marvellous, musical, lyrical source, which *was* life, which *is* a dream”.

To see the full nature of Dreiser's final imaginative understanding, it is necessary to glance at the emotional ingredient that combined with his objective empirical enquiries. This may be summed up by his description of the same element in Thoreau of whom he writes that at no point is Thoreau willing to imply, “let alone admit, the absence . . . of a universal and apparently beneficent control, which, however dark and savage its results or expressions . . . is none-the-less, in some larger and realer sense . . . good—and more, artistically beautiful and satisfying, and so,

well intended for all”.

This is like saying that whatever the appearances, including the appearances of certain adults, whatever the screaming nightmare, that which made children could not but ultimately intend well for them.

The early Dreiser had thought man was abandoned, that Nature was indifferently cruel; now he thought the opposite. The reason for the change was a Wordsworthian experience Dreiser had in 1937. He was spending three months at laboratories on Long Island analysing scientifically the roots of life shown under the microscope. He came out into the sun and stooped to examine a cluster of small yellow flowers. He wrote in a letter: “Here was the same beautiful design and the lavish exquisite detail that I had been seeing all day. . . . Suddenly it was plain to me that there must be a divine, creative Intelligence behind all this. It was after that, that I began to feel differently about the universe. I saw not only the intelligence, but the love and care that goes into all created things.”

The higher the intelligence, the higher the purpose? Dreiser's suffering was the measure of his growth, an evolution now clearly visible as spiritual as he left the provincial to achieve the centre.

Dreiser's final mood is outlined in a long letter of July 18, 1940 to the Roman Catholic writer of a thesis on Dreiser who had gone so far as to say that Dreiser believed in God and the immortality of the soul while regarding it as ultimately unintelligible. In this letter, Dreiser referred to an “over” or universal soul and he considered that modern science and philosophy saw that this soul is “being” and contains all wisdom and all creative power. His scientific and philosophical studies, he wrote, compelled him to feel

that there could be "but one primary creative force or soul", the laws of which are obeyed by all matter-energy. He sees all creation as manifestations of this all-pervading force. He added that to think that he may continue, in any form, as part of the process was enough for his well-being and peace of mind.

These ideas influenced the conclusion of *The Stoic*, while his final statement, *My Creator*, made in 1943, was written while he wrote *The Bulwark* and resembles the pacific Quakerism of that novel. In *My Creator*, Dreiser impartially sums up his final state of mind; he observed that he had at long last profound reverence for a process that might be eternal, and he prayed to remain the infinitesimal part of it that he was.

After a lifetime of struggle and despair, but of persistent enquiry, Theodore Dreiser's sense of drift and chaos had become a belief

in necessity, orientation, and awe; he said that these qualities walk with deep, understanding serenity. His cycle of development illustrates one of Arnold Toynbee's universal cycles of development as the species slowly and painfully grows up, "faith" being replaced scientifically by "understanding".

Dreiser died in the presence of his second wife, Helen, and was buried at Glendale, California in December 1945, aged 74. Charles Chaplin attended the funeral and read Dreiser's poem, "The Road I Came", which makes it clear that Dreiser was fully persuaded that Something knew the way he had come, so closely in touch was he with the directing force behind the multitudinous manifestations of life, the permeating or pervading Intelligence in the universal soul or collective being of existence.

DISTRIBUTIVE JUSTICE ON THE INTERNATIONAL LEVEL

Part I: The Nature and Problem of Distributive Justice

Henry Winthrop

1. The Recent UN Resolution on Distributive Justice

In mid-September 1975, the General Assembly of the United Nations adopted a most unusual resolution on development and international cooperation. This was a resolution whose intent was to help both Third World countries and Fourth World countries to eliminate poverty and come abreast of the twentieth century in their economic and social development. The General Assembly declared itself determined to eliminate injustice and inequality which afflict vast sections of humanity and to accelerate the development of developing countries. The United Nations resolution indicated the areas in which that organization was prepared to give expression to measures that would fulfill the ideal expressed by the General Assembly. Those areas, as reported by the *New York Times* were the following: international trade; transfer of resources for development, monetary reform; industrialization; food and agriculture, cooperation among developing countries; and restructuring of economic and social sectors of the United Nations system.¹ The *Inter Dependent*, a newspaper published by the United Nations Association, classified the areas somewhat differently.²

The resolution was hailed as a breakthrough towards peace and brotherhood. The *Inter Dependent* devoted several feature stories to the resolution.³ Harlan Cleveland, a political

1. "Preamble and Excerpts from U.N. Summary of Development Text", *New York Times* (September 17, 1975).

2. This newspaper's classification ran as follows: trade, money, science and technology, industrialization, food and agriculture, and restructuring. See "The Economic Issues", *The Inter Dependent* 2, no. 8 (October 1975): 9.

3. These feature stories were the following: (1) "Major Diplomatic Breakthrough: North Reaches Out to South at the UN", (2) "The Economic Issues", and (3) Paxton T. Dunn, "US-Third World Consensus: Promises to Keep", *The Inter Dependent* 2, no. 8 (October 1975): 1, 12.

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scientist who had served as assistant secretary of state and U.S. ambassador to NATO in the sixties, recognized that the resolution passed by the General Assembly showed recognition of the fact that the world is now faced with a very serious problem in distributive justice. We shall have more to say about distributive justice shortly. Cleveland had this to say:

The international politics of redistributive justice is bound to probe deeply into the domestic maldistribution of wealth and opportunity inside each country. If the more affluent peoples are asked to modify their living standards and rearrange their priorities, which for most of them may require important changes in life-styles and work ways, their peoples and especially their political leaders will want to know that the changes are worthwhile, that they give promise of meeting the basic needs of the needy—rather than of speculators, brokers, feudal chieftains, and military governors. At the same time in the poorer countries, the political courage and administrative drive to be self-reliant (getting population growth under control, maximizing food production, extending education, assuring employment) will also depend on the larger bargain—on assurance that the “advanced” nations are not advancing past the limits of environmental prudence and on large and automatic transfers of resources and technology. The planetary bargain will be a trade-off between self-reliance and self-restraint

Can basic human requirements be met, on a world scale, over time? The currently popular way to avoid facing this question is to speak loftily of life-boats and to refer regretfully to Thomas Malthus. But some work we have recently sponsored at the Aspen Institute—especially a remarkable study of “Human Requirements, Supply Levels, and Outer Bounds” by John and Magda McHale—suggests a different, cautiously upbeat conclusion: that we the people of the biosphere can lay our hands on more than enough of the relevant resources to enable all members of a growing but manageable world population to maintain a minimum standard of life without threatening the ‘outer limits’ of an astonishingly rich and adaptable environment.⁴

Here and there articles have begun to appear on the widening gap in wealth between the nations of the north and the nations of the south on our planet. The nations of the north—English-speaking North America, Europe, the Soviet Union and Japan—are regarded as the wealthy nations. The nations of the south—in Latin America, Africa and Asia—are regarded as the poor nations. Lester Brown has devoted an entire chapter in one of his

4. Harlan Cleveland, “Our Coming Foreign-Policy Crises”, *Saturday Review* 2, no. 25 (September 6, 1975):14. Dr. Cleveland served as president of the University of Hawaii from 1969 to 1974. At present he is director of the Aspen Institute’s Program in International Affairs.

books to this widening gap.⁵ Ron Horswell has written a rather succinct description of the tensions that exist between these two groups of nations.⁶ It is this widening gap in wealth that underlies these tensions. The demand by Third and Fourth World countries, that this gap be narrowed, is essentially a call for what Harlan Cleveland has called "redistributive justice".

What, then, is the problem of distributive justice—or redistributive justice, to use Cleveland's phrase—that underlies the detailed commitments to be fulfilled in each of the six categories of the UN resolution? Let us give a brief description of that problem at this point.

2. What Is Distributive Justice?

An increase in this year's total national output of all goods and services, over that produced last year, is, by definition, an increase in gross national product (GNP). For all practical purposes most of such an increase can be regarded as flowing directly from improved science and technology. For the sake of vivid imagery let us liken this year's increase in GNP to the baking of an extra national pie which is to be added to another baked pie which is equal in size to that which was baked last year. Basically we can regard this extra national pie as having been produced by six cooks. These cooks are—in economic terms—the six sectors of our economy which have, in one way or another, contributed to the baking of the extra national pie: management, labor, the technicians responsible for improved science and technology, the investors, the consumers and the government, of course, not necessarily in that order. Each of these sectors or cooks might try to make out a case for claiming the whole extra pie on the grounds that it is his services which, in reality, produced the extra national pie. In actuality the claims will be more modest than this. Each may claim only that he is entitled to the largest share of that pie, on the grounds that his services were more indispensable than the services of the other cooks in producing the extra pie.

The first three of our cooks could state that this largest slice could be handed to them in a form which is really a larger share of profits after taxes. Management could ask for this larger slice in the form of either increases in salary or through an extra end-of-the-year bonus. Labor could ask for it in the form of increased wages or profit-sharing. The technicians could make the same claims as management. Investors could demand the lion's share of the extra national pie in terms of increased dividends from profits. The consumers could make their claims in terms of a demand for lowered prices of available goods and services. This would be equivalent, of course, to asking corporations to accept smaller net profits. Finally, the government could claim the lion's share of the extra pie through a larger tax slice of gross profits. It is important to remember that rather strong arguments could be

5. Lester R. Brown, *World Without Borders* (New York: Vintage Books, 1972), 395 pp. See especially chapter 3, "The Widening Rich-Poor Gap", pp. 41-57.

6. Ron Horswell, "The New Civil War", *Plain Truth* 15, no. 17 (October 18, 1975):6-7.

marshalled by each cook to justify his claim.⁷

These claims tend to be incompatible. One can distribute the extra national pie equally among all the claimants—or unequally. All claimants reject the first alternative. In order to satisfy the second alternative one must find a mode of distribution which does not ask that the satisfaction resulting from it be maximized but rather that the dissatisfaction resulting from it be minimized. We seek a mode of distribution which will rank the six claimants in an order which reflects the decreasing portions of the extra national pie which is to be served. The quest for this rank order of distribution is one form of the problem of distributive justice. In passing, it might be mentioned that the number of possible rank-order distributions involving six claimant sectors of the economy amounts to 720, which is the number of possible permutations based upon rank order. The distribution finally selected must be justified in terms of its present and foreseeable future consequences for all six sectors, as well as the criterion of minimizing dissatisfaction.

The criterion explicitly invoked in the preceding paragraphs is that justice in the distribution of the increment to GNP is achieved by proportioning the division according to the magnitude of each sector's contribution to that GNP increment. This, of course, is subject to the proviso that agreement can be reached on the relative magnitude of each sector's contribution.

The considerations just discussed lead to difficulties in meeting this criterion due to the fact that each sector's claim that it made the largest contribution to the increase in GNP is not easily validated and, in addition, there are no objective means for determining the relative contribution of each sector in any given year. But suppose we did develop an objective method for determining the monetary value of each sector's actual contribution to the increase in GNP. Suppose further that—at the same time but quite independent of the fact that we have developed the objective measure just mentioned—there is now general agreement on a new criterion for distributive justice, namely, that the per capita share of all productive members of each sector should depend upon the actual contribution made by each sector. This new criterion would not only not solve the problem of distributive justice but it could create an unforeseen paradox. To see what is meant here, let us structure the situation a little more finely for purposes of analysis.

Let us identify each sector by a number, thus: 1. scientists and technologists, 2. managers, 3. investors, 4. workers, 5. government, and 6. consumers. Let the rank order of the *monetary* value of the output of any sector be represented by X_1 , X_2 , X_3 , X_4 , X_5 , and

7. The reader should realize, of course, that the argument presented above on behalf of the increment to total national output applies with equal force to the total volume of national output. Conflict occurs more readily over the manner in which an increase in national output is to be divided. We tend to become resigned to what we regard as the inequities of previously existing divisions of the social product. One can, of course, divide up the claimant sectors of the economy in other ways, so that there may be more or fewer than six cooks. For a nontechnical discussion of this problem the reader should consult the following: Kenneth E. Boulding, *Economic Analysis* (New York: Harper & Brothers, 1941), 809 pp.; see particularly pp. 784–87. For a more technical discussion of matters related to this problem, see Jerome Rothenberg, *The Measurement of Social Welfare* (Englewood Cliffs, New Jersey: Prentice-Hall, 1961), 357 pp.

X_6 , where X_1 is the monetary value of the output of the first sector, where X_2 is the monetary value of the output of the second sector, etc. Let us now employ a symbol like X_{16} , where the first subscript numeral (1 in this example) identifies a sector and the second subscript numeral (6 in this example) identifies the rank order of the monetary value of its output. Thus the symbol, X_{16} , will mean that the monetary value of the output of sector 1 was sixth in the ranking of the monetary values of all the sectoral outputs. The symbol, X_{61} , will mean that the monetary value of the output of sector 6 was first in the rank order of the monetary values of all the sectoral outputs.

But as I have noted above, we have supposed that we now have a method for determining the actual monetary value of the output of each sector (in dollars, pounds, rupees, etc.). Let the number of productive members in our six sectors be designated as N_1 , N_2 , N_3 , N_4 , N_5 , and N_6 . Suppose N_1 represents the smallest number of sectoral productive members and N_6 the largest number of sectoral productive members. Suppose further that N_1 is very much smaller than N_6 . Then the monetary value per capita for sector 1 will be X_{16}/N_1 . This means that sector 1 which produced the smallest monetary value of output (as part of GNP) may prove to have the largest monetary value of output per capita (that is, per productive member) because of the very low figure for N_1 . By the same token the monetary value per capita for sector 6 will be X_{61}/N_6 . This means that sector 6 which produced the largest monetary value of output (as part of GNP) may prove to have the smallest monetary value of output per capita (that is, per productive member) because of the very large figure for N_6 .

This situation would represent a paradox of sorts. Those who contributed the most to the increase in GNP may receive the least distributive reward while those who contributed the least to the increase in GNP may receive the greatest distributive reward. Thus, the use of the second criterion, namely, that the per capita share of a sector's productive members should depend upon the actual contribution made by each sector, gets us into a different as well as a worse quagmire. Intuitively we feel that the productive members of sector 6 will be outraged while the productive members of sector 1 will have a sneaking sense of shame that they will do their best to hide—a sense of shame that springs from getting more than one deserves.

We feel this way intuitively only in those cases where the output of a sector is not directly proportional to the number of members it contains but rather to the fruits of greater knowledge, superior education, organization, ingenuity, effort and similar intangible factors. Naturally where the output in all sectors is a direct and simple function of the number of their productive members, the distributive awards based upon the per capita criterion would, of course, seem quite just.

An inequitable division of allotments, such as we have described above, can hardly be said to represent an acceptable solution to the problem of distributive justice. Such a division, taken together with the goal of justice sought, would represent a contradiction in terms.

We have focused upon these considerations in order to bring out the difficulty of arriving at criteria for distributive justice that will achieve a universal consensus.

The description furnished above deals with distributive justice on the national level. However, what is involved when we talk about distributive justice on the international level?

The problem of distributive justice on the international level calls for answers to such questions as which nations shall receive what raw materials and finished goods, given national variations in population, net rates of population growth, indigenous resources, skills and national contributions to a planetary economy. These are strictly ethical and practical questions, even though they are posed within the framework of an international economy.

Certain aspects of the problem of distributive justice on the international level can be thought of in terms of an international redistribution of incomes. In order to effect an international redistribution of incomes, we have to rely on such direct means as (1) an international income tax; (2) taxes on the use of natural resources with a view to making the proceeds available to countries whose resources are being depleted; (3) the extension and improvement of those types of educational and research institutions whose activities can be expected partly or totally to increase the welfare of developing countries; and (4) various types of capital transfers and financial arrangements. Among the indirect means for the international redistribution of incomes are trade policies, commodity agreements and voluntary population redistribution, that is, emigration from poor countries.

But the type of problem in distributive justice that would arise for an international economy would be quite different from the type of problem in distributive justice that would arise within the domestic economy of a given nation. This is because different sectors of a national economy clearly make a contribution to production and welfare, defined conventionally in terms of Gross National Product, while filing unequal and competitive claims on an annual increase in GNP. These sectors usually assert that they are entitled to the lion's share of the GNP pie. A redistribution of Gross World Product (GWP), whether in terms of the buying power of national incomes or in any other terms, will involve nations (or regions) or areas that may have contributed minimally, nominally or not at all to GWP. The redistribution is likely to be made in terms of the receiving entity's population needs rather than in terms of the receiving entity's population's contribution to GWP. This will clearly call for a different approach to the problem of distributive justice than the approach that would be used for a national economy, each of whose competitive sectors is filing a differential claim on GNP—a claim that asserts an entitlement to a larger portion of the GNP pie than the entitlements to portions that are to be distributed to any of the remaining sectors. In order to bring out the difference between the problem of distributive justice on the national and international levels, let us go more deeply into the question of distributive justice in each of these contexts.

What will be the substantive nature of the notion, itself, of distributive justice. The implications of this concept are so complex, that one is likely to realize what is involved only if he or she is plunged into the task of making an effective translation and application of the concept to a real economic and social setting. The extreme complexity of the notion of distributive justice and of its associated concepts of "welfare" and "social welfare" will

be appreciated if the reader addresses himself to following the brilliant discussion of these ideas by Nicholas Rescher.^{8, 9} Here again, one might note that the preceding two concepts have to undergo considerable change in meaning when applied to the international level. The basis for fractional claims to a GWP, by each of the nations of the world, will be quite different when most of the GWP has clearly been produced by other nations. And the principal criteria for assessing the degree of the individual's welfare create enormous dependencies when applied to nations. These criteria, for example, as outlined by Rescher, are the following:¹⁰

- I. Physical health
 - A. Life expectancy
 - B. Physical condition (vigor, adequacy of functioning)
 - C. Physical feeling tone (absence of pain or physical distress)
 - D. External normality (absence of disfigurement and overt physical impairment or disability)
- II. Mental health
 - A. Capacity to act effectively along chosen lines in chosen directions (outside controlled, limited, or institutional contents)
 - B. Mental tone (absence of abnormal fears, animosities, mental distress and connected symptomology, etc.)
 - C. Satisfaction with himself and his circumstances (self-respect and contentment)
 - D. Capacity to function normally in interpersonal transactions
- III. Material prosperity
 - A. Income
 - B. Possession of negotiable assets (money, land, negotiable securities)
 - C. Access to the services of others
 - D. Security in tenure of material possession
- IV. Personal assets
 - A. Intellectual resources
 - B. Social resources
- V. Environmental resources
 - A. Availability of goods for personal use
 - B. Availability of personal services
 - C. Quality of the environment (artificial and natural, social, public health, etc.)

8. Nicholas Rescher, *Distributive Justice: A Constructive Critique of the Utilitarian Theory of Distribution* (Indianapolis, New York: Bobbs-Merrill, 1966), 166 pp. See particularly chapter 2, section 6, "The Question of Claims", pp. 41-44; chapter 3, "Legitimate Claims", pp. 47-69; and chapter 4, section 9, "Our Own Position: The Canon of Claims", pp. 81-83.

9. Nicholas Rescher, *Welfare: The Social Issues in Philosophical Perspective* (Pittsburgh: University of Pittsburgh Press, 1972), 186 pp.

10. *Ibid.*, pp. 12-13.

When applied to nations in relation to the prospect of a redistribution of resources or income, some nations will have to be completely and unhappily dependent upon others. Thus a healthy environment for most of the world's nations will depend upon the sanity, goodwill, notions of the good life, and attitudes towards the concept of a no-growth economy of the technologically advanced and highly industrialized nations of the West and also of nations like Japan. In general, the attitudes towards economic growth and its implications for the environment, held by governmental decision-makers and business leadership, will be important here. Succinct summaries of this relationship can be found in the work of Barkley and Seckler,¹¹ Marx¹² and Barnett and Morse.¹³ We can therefore see that environmental resources will be almost completely dependent upon the industrial leadership of the West and the degree of cutback in the standard of living that the citizens of our consumption-oriented societies are willing to endure. This will clearly make many smaller nations parasitic upon the industrialized ones for their welfare, which is something that is quite different from the situation in which all the productive citizens of a given national economy can justifiably make competitive claims upon its GNP and can call for a redressing of inequities in social welfare, knowing full well that they are essential contributors to the production of that welfare.

It is in these senses, then, that the problems of distributive justice and social welfare must be viewed afresh in the light of any effort, like that of the UN, to construct the architecture of the new international economic order.

[To be concluded in the issue of April 1976]

11. Paul V. Barkely and David W. Seckler, **Economic Growth and Environmental Decay: The Solution Becomes the Problem** (New York: Harcourt, Brace, Jovanovich, 1972), 193 pp.

12. Wesley Marx, **Man and His Environment: Waste** (New York: Harper & Row, 1971), 179 pp.

13. Harold J. Barnett and Chandler Morse, **Scarcity and Growth: The Economics of Natural Resources Availability** (Baltimore: Johns Hopkins University Press, 1963), 288 pp. Published for Resources for the Future, Inc.

CURRENTS OF EVENTS

Ronald Jorgensen

INDIA, CHINA, RUSSIA, AMERICA

Since our January discussion of the coming harmony of these four nations, several news reports and commentaries have been made of the prospects for Sino-Soviet rapprochement and normalization of Indo-Chinese relations. And, as you would expect in the dawning age's still active embers of national egoism, nervous undertones of U.S. fears for a Russian-Chinese congruence are probably harbinging a similar Russian pianissimo which will fidget over prospects of Chinese-Indian harmonization.

Meanwhile, this impending quartet needs the setting of some conditions to enable a genuine conjunction. One of these is a more equal balance of development and strength between all four members. That clearly means India and China must rise closer to the U.S. and USSR positions.

That is exactly the process indicated in *Newsweek* magazine (5 January 1976, "1975: The Year in Review"), where the dynamics of both the USSR and U.S.A. are somewhat extensively assessed in a dim and descending mood and, just as significantly for a Western-based publication, hardly a paragraph is given each to the rising curves of China and India. History is replete with this kind of focus on the decline of great powers and a peripheral relegation to the ascent of others—so much so that it can nearly be taken as a sign of the coming change.

This does not, obviously, mean the two main powers are now in a process that will issue in imminent collapse: the capacities of rebirth are strong in both. But it helps provide the adjustment toward more of an equality that China and India will need to actualize this four-nation confluence.

India's Emergency

Much has recently been written about China's development and about the negative aspects of the emergency in India; domestic discussion of the emergency's positive aspects has been mainly confined to its more external gains—cleansing and resuscitating the economy; awakening the latent capacities of courtesy and diligent service in institutions that minister to the citizenry such as hospitals, schools, the postal service, and transportation. I think the value of these important and necessary changes is felt personally by everyone living in the subcontinent, but there are other aspects less direct, obvious, and material which carry a greater significance into the future, domestically as much as internationally.

The difference between the present mood and that of a year ago is seen between the lines of report after report—printed, in lectures, or in conversations one has with those arriving from one city or another, town or village. It is a confidence in an Indian genius of effort which is moving to replace the sense that authoritative development patterns come from the West—in agriculture and industry, education, and polity to name a very important few. Even though the country's intelligentsia has long been aware of this cardinaly needed change, it was the occasion of the emergency which sent a shudder of recognition and liberating energy through the land. Over the past couple of months in particular, domestic newspapers are vibrant with new ideas in a variety of fields.

The *Indian Express* of 11 December 1975 reported that the constitution, which has been felt to be more imitative of Western democratic tradition than assimilative, is being considered for substantial changes that would increase expression of the Indian nature of political integration. It is acknowledged that such a prospect would require and desire the widest consultation among savants and the citizenry at large. This, after less than thirty years of the constitution's operation, indicates the baselessness of fears that India would not be able to flexibly respond to the rapidity of contemporary change. She may, in fact, become a vanguard of the transition from the present fundamental trio of alternatives—capitalistic democracy, socialistic collectivism, and centralistic totalitarianism—to the political mutation adequate to a global consciousness.

In the *Hindu* of 11 January 1975, Prime Minister Indira Gandhi declared that the country could no longer afford what she called "sectional" differences of interest between employers and employees (and the lockouts and strikes such differences induce). She explained that greater productivity in itself was not the only reason for determining this change; the country is voyaging, with others in the world, through a trackless economic crisis, and

we have to present a far more united front and effort with each section trying to see the difficulties of the other section.

That awareness seems to be growing, and after the emergency is worked through, the interface of these sections may have evolved to something more progressive than the world's old classic of confrontation.

Professor Satish Dhawan, the chairman of the Indian Space Research Organization, announced in a February 2nd lecture (*Hindu*, 4 February 1976) that castor oil [a food-toxic product of the widely grown, plentiful castor oil plant here] has successfully been converted into rocket fuel, and it will be tried in India's Satellite Vehicle Carrier-3. This has telling significance because rocket fuel has always had to be imported and, due to its strategic importance, is difficult to get. In order to achieve self-sufficiency in rocket fuel India needs to appropriate only 0.1 per cent of her castor oil production. But the incident's enduring interest lies in the turn toward an inexpensive, indigenous solution that would have, a couple of years ago, probably gone the route—from products-export to foreign-exchange acquisition to purchase on the world market—that affects the integrality of development so much less beneficially.

Another example is the change in attitude toward medical care, not to mention the accelerating determination toward family planning. At the annual conference of the Association of Physicians, held in a country with voluminous expertise in numerous medical systems which have been nearly overpassed in the attraction to the showy short-term results of Western allopathic treatment, it was suggested by the prime minister that the nation evolve a "working partnership" between indigenous and Western treatments (*Hindu*, 24 January 1976). "This may sound like heresy," she admitted. "But how else can we take medicine to those in remote areas who cannot reach clinics?" It also sounds like a basis for integration in the art of medicine which may recognize the proliferation of possibilities beyond the orthodox hegemony grown out of the American Medical Association—an inevitable development for medical ecumenicity.

Some overseas reports shining on the Indian economy have a much more interesting dimension revealed in the domestic press. For instance, the *New York Times* of 25 January states that inflation, increasing at an annual rate of thirty per cent one year ago, has shrunk to a two per cent increase (Indian figures show a negative percentage at present)—a nearly unique achievement against the flow of world inflation. Yet Indira Gandhi, speaking at the Pugwash Conference (*Indian Express*, 15 January 1976), said:

At the mundane level, we want to achieve industrial progress without pollution. At the higher level, we should like to give our people the benefits of science without the loss of their spiritual moorings.

The article continues:

India did not want to raise its consumption except for those who lacked their basic needs. "But beyond that level, we should say thus far and no farther."

The correspondence between other policy announcements and acts during the emergency suggest the above is not idle verbalization, and the gathering of this huge nation in such a direction—a direction China's is similar to in important respects—seems exactly the influence which Russia and America are, somewhat unknowingly and with some resistance, in need of.

THE UN'S POINT OF NO RETURN

For as long as I can remember the United Nations has been talked and written about in politely deprecating terms, and criticism has been witheringly directed at its structural and operational weaknesses as if to suggest: If those "UNers" would put enough authority and enforcement power in their organs and truly start working together, the United Nations would deserve more of our respect and support. As simple and exaggerated as this

is in clear moments, it would be difficult to have confidence that most thinking persons have not touched the vibration of these feelings often in the past thirty years.

In the past month three writers, who have no direct contact with each other, have expressed an idea in striking similarity which simply turns everything around: it is not the United Nations, it is us. The three are Varinda Tarzie Vittachi in the January 5th *Newsweek*, and Donald Keys and M. P. Pandit in the February issue of *World Union*. In a sub-summary of "The Synthesis of Nations", Donald Keys writes:

As regards a world supercenter integrating the localized centers of human action and organization, the United Nations is its representation in human affairs. The United Nations is an imperfect and partial manifestation of that transcendent supercenter, largely because the member nations are not yet ready, prepared or willing to see the UN become its fuller manifestation.

As this idea becomes more powerfully widespread the passing of the UN's point of no return becomes more evident; for, recognizing the finger points within, and working there on ourselves and the nation's self, burns away the contact with our self-justifying distortions. With that contact going and a return to that slavery becoming impossible, the truth of a limitless future opens.

9 February 1976

THE ROYAL PYJAMA'D HORSE

Maggi Lidchi

There lived in a far and sparsely populated country a colony of animals and a very strangely assorted colony it was. There were lots of horses and only one little zebra. There was a single mad buffalo and a very eccentric old lady parrot, and I do mean eccentric (untidy too). There were a number of elephants and one mouse. There was a single llama which as you know is an animal generally found in South America and there were various other animals all of which I do not have to list immediately, and even not at all unless they come into the story. These animals from various parts of the world had survived a cataclysm and had all been washed up onto the same shore.

This story is about the little zebra. Since he was the only zebra in this colony it was assumed for all practical purposes that he was an orphan and as almost invariably hap-

pens in such cases he was adopted by the beings he most resembled, in this case the horses, just as the mouse had been adopted by the elephants. In fact the horses who were wild horses, very wild, at first thought that he was a baby horse from some noble and very cultivated family. They had heard about gold caparisoned horses from the elephants, and from the same elephants, who had worked for royalty, they had heard about maharajas who wore pyjamas. Being somewhat confused by all these stories they had assumed that the zebra was in fact a little horse in striped pyjamas which he would one day outgrow. They didn't mind and indeed hardly noticed when the pyjamas grew with him. They had grown quite fond of him in their rough way, as his stepfather, Fred, demonstrated by frequent kicks on the pyjamas. He was everybody's spoilt darling and they called him Prince Chandrakant because the elephants spoke of a legendary Prince Chandrakant of India who had been orphaned and adopted by elephants.

With a name like Prince Chandrakant he made the elephants feel nostalgic for their mother country and though they are generally very wise animals they tended to make much of him, even too much, for elephants have a weakness for children. They used to carry him in their trunks and let him ride on their backs. And since he was Prince Chandrakant they sometimes knelt before him and ever

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put their heads to the ground, all of which Chandrakant liked very much. And though it started as a game it ended up as a habit, which was all right for the elephants because they enjoyed it but the horses said *they* had to live with Chandrakant and they didn't feel like doing circus tricks for him; besides they didn't come from India which is one of the few countries in the world where people don't make a fuss about getting a little dust on their foreheads. So that while Prince Chandrakant was the horses' darling too because he was so handsome and bright and so pretty and glossy in his white and black pyjamas he was also at times everybody's pain in the neck; and sometimes one of the horses would say "What he needs is a good kick in his pyjamas" and that's just what Chandrakant would get.

When Chandrakant was an adolescent he was still the size of an infant horse and that was confusing for all concerned. Sometimes he was told to act his age and sometimes he was, when one of the lady horses felt maternal, treated as their little pet.

One day when all in quick succession he had been treated to an elephant-back ride, then a kick, then a trunk stroking because he had been found crying, then another-kick when he went home, he went to the river to be alone which seemed the best thing to be. He went down to the water and looked at himself. Yes he was very pretty, no doubt, but what good was that doing him?

"Pretty Princeling, Pretty Princeling", said Pomegranate the parrot who had perched on a branch of the weeping willow which swept the river. Chandrakant knew that he was about to hear a few home-truths so he pretended he hadn't heard anything and continued walking upstream. But Pomegranate flew from branch to branch above him.

"Pretty Princeling, Pretty Princeling." She had the parrot's habit of compulsive repetition which can be very grating.

"What do you want?" he asked looking up into her bright round expressionless eyes.

"What do you want?" It was like hearing your voice in a mirror.

"What is it Pomegranate?"

"Pomegranate sees. Pomegranate sees." It was one of her roles. She liked to play the wise old crone, a particularly tiresome role because it always meant advice. Trouble was it sometimes also meant useful information. Chandrakant had to decide whether to go along with her or be rude which having sore pyjamas is what he felt like doing.

"Yes, yes Pomegranate sees because she pokes her long beak in everywhere", he said from which you can see what his decision had been.

"Everywhere, everywhere" she echoed. "Everywhere interesting to a pretty little prince."

"I have seen . . ." she stopped and began picking at some berries.

"What have you seen?"

"What have you seen. What have you seen. Young Princeling the price of knowledge is . . . There is always a price to knowledge. Sometimes it is high. But it varies. For you this afternoon it is politeness if you can manage it."

He was very much tempted to say "Who cares what you've seen; you probably saw your ugly old face in the water", but he stopped himself just in time because he wanted to know what she had seen. He was curious. He had the feeling that it was something about himself and he was very interested in everything that had anything to do with himself.

"Well what do you want me to do?"

"Do. Do. What do you want me to do? Say something nice, just for once", she said archly bending her head to one side and blinking at him rapidly. Chandrakant was terribly out of practice for this sort of thing. Indeed he'd never had any practice. And for the life of him he couldn't think of anything nice and polite to say to this old painted parrot. Should he tell her that she had nice feathers? Actually he had long wanted to pull out one of those long emerald green feathers to wear on his forehead because the elephants said that the maharajas wore feathered turbans as well as pyjamas. But sometimes no matter how much you want a thing, even if you have the price of it tucked away somewhere, it is impossible to bring it forth. And so now although Chandrakant wanted to say something nice the sight of the old crone made it stick in his throat. He tried and he tried but he couldn't. It was like choking. So he said sulkily, "I can't. I am trying but I can't. I've forgotten."

"I've forgotten." He didn't know whether she was repeating his phrase or saying that in that case she too had forgotten. He tried again but nothing would come and now the effort was beginning to make him cross.

"Well I'll tell you what", said the parrot. "I'll tell you what. If you can't now you can owe it to me."

"What does that mean?"

"What does it mean? It means that the first nice kind thing that you say, wherever you are, you must bring to me. Do you agree? Do you agree?"

"Oh yes I agree." Some people will always propose these hard bargains and they always find someone thoughtless enough to agree. Chandrakant wasn't one to think much of how things would be tomorrow.

She said, "I saw that Royal Prince Chandrakant would one day be a great conqueror.

Chandrakant was stunned. He heard her voice as though in a dream. But he quickly recovered. In fact now that he'd been told, it was as though he'd had always known. The old parrot's scratchy croak was suddenly the sweetest voice he had ever heard; the sweetest and the wisest. He looked up at the bright now unblinking eyes and the beak he had once thought grotesque. Now its curve seemed pregnant with wisdom. Of course he had known, only he had never known how to put it. How fortunate, how providential that such a wise being had recognised him; his heart overflowed with joy. Pomegranate coughed. Chandrakant murmured in agreement, "Isn't it wonderful?" The old parrot coughed again but sat quite still on the tree and gazed at him patiently. Was she waiting for that promised thing? But Chandrakant's mind was busy with the revelation of his destiny. He saw himself at the head of a great herd of striped and adoring beasts. The elephants had once told him that his name meant Light of the Moon. He had always known that it suited him because of the light shining quality of his coat which was a strange silvery white beside the dark stripes, and indeed his coat was so beautiful and glossy that when he ran it looked like a silvery garden by moonlight with dark branch shadows playing over it. Now he looked down into the water and knew himself the very figure of a Prince, an incomparable jewel among beasts. Beside his own face he saw reflected in the water the old parrot and for a moment in the not quite still water she too looked beautiful with her wide eyes and her exotic colours, and from the depths of his grateful heart he was just about to say a nice kind thing which was "With the water rippling, Pomegranate, you don't look so ugly", when he was distracted by the mem-

ory of the maharajas' feathered turbans. And instead of saying the nice thing he said: "Please, Pomegranate, if I am to be a great leader as you say, I need a beautiful feather for my forehead. Will you give me one?"

The old parrot cocked her head and regarded him, Chandrakant held his breath in case she should say no, for it now seemed to him the most important thing in the world that she should give him that red tail feather with the colour of rubies in it. He was at the same time a little embarrassed because the way she was looking at him reminded him that he was asking for a second favour without having paid for the first. At the same time the belief was strong in him that a great being has the right to ask for whatever he needs to fulfill his destiny. Then when he reaches his goal he is able to bestow great riches and favours on all. And he vaguely thought, though without bothering to mention it, that if Pomegranate gave him this feather which he needed so much he would one day reward her perhaps with an obscure place in his entourage. He turned away from the reflection in the water and looked up at the real Pomegranate beseechingly and also to gauge the possibility of his getting what he required.

"The feather, the feather", stuttered out Pomegranate. "I'll tell you what, I'll give you the green feather if you come back and tell me the second nice kind thing that comes to you too."

"Oh yes, yes of course I will, but I want the red feather."

"The red feather. The red feather. For the green feather the colour of emeralds you will have to come back with the second gift of kindness that comes from your heart, but for the red feather with the colour of rubies you

will have to come yet a third time so that the third kindness too that comes from your heart is mine. Do you agree?" Something which might have been a warning fluttered in Chandrakant's solar plexus.

"Of course I agree." He was now quivering with excitement. Everything was coming to him. The silver and black of his coat rippled as his muscles tightened with expectation. He looked down into the water and what he saw was not a chubby glossy little animal with a beautiful coat but a young god. His beautiful eyes were wide open, and he knew that with the feather between them on his forehead he would be simply beyond compare. He saw the reflection beside him and half closed his eyes to shut her out. He wanted to dream his great dream alone. He saw himself, his mane lying back in the wind, thundering across a plain to where a great herd of royal elephants waited to kneel before him as they had always done. But behind them was a herd of maharajas in pyjamas with stripes of red the colour of rubies and green the colour of emeralds, and in their turbans they wore green feathers, but none had a red feather like his and none had a coat of moonlight and black shadow like his. And they too waited to make obeisance to their lord, Prince Chandrakant.

Something fell on his shoulder making him jump. It had seemed hard and heavy but as it fluttered to the ground beside him he saw it was the red feather. He was at a loss as to how to put it on, and seeing this the old parrot tittered though not unkindly for though she was a nuisance parrot she was not particularly malicious. As she gazed down (parrots almost always look as though they are glaring or staring but sometimes they are only gazing) she had been struck by the

poignancy of the confident young Chandrakant, unable to affix the much-longed-for feather to his forehead.

"Come I will put this on your forehead so that it will never come off as long as you are true to your word, and for this favour I ask no further promise of kindness from you."

Chandrakant twitched a shoulder nervously; certainly he wanted this feather on his forehead as soon as possible but he could imagine a more inspiring coronation than at the hand of this fussy flapping old bird. Mukund who knew how maharajas wore their turbans would have been more suitable for this office.

"Aren't we the cat's pyjamas" she said at last with bright admiration.

"Who asked you?" snapped Chandrakant. He was irritated by what he took to be a slighting reference to his pyjamas. In fact, Pomegranate had intended no such thing.

"Who asked you? Who asked you?" tittered the bird who could not it seemed be provoked to malice today. "Ah little Chandrakant, a Prince must show gratitude. A Prince must always show gratitude even if he does not yet know how to feel it. Now remember Prince Chandrakant three kindnesses, a fourth is optional but three you owe me and don't forget." He switched his tail impatiently. With a little screech and a flutter of wings she flew away. Chandrakant caught her brilliant departure in his peripheral vision but he was too busy admiring himself to say goodbye. Indeed he was very pleased with what he saw and even, now that the feather was there, pleased to be able to appear before the elephants already crowned. They needn't be told who had affixed it. Knowing his elephants he knew they would say it was Krishna.

Slowly and with his head held very high

and a frown at the place where the feather started Chandrakant approached Mukund who was standing under a tree swishing his trunk. At first Mukund took no notice of him but just went on switching his trunk as though there were nothing special about Chandrakant today. "Mukund", said Chandrakant sternly.

Mukund seeing immediately what was wanted said, "Good afternoon your majesty" and bowed his head. But this Chandrakant had heard many times. Today called for something new. Mukund seemed not to have noticed the feather, and being shortsighted indeed he hadn't.

"Mukund", said Chandrakant solemnly, sticking his head up so that the feather tickled Mukund's knee a little. "Today is a very special day."

"Oh yes Chandrakantbaba today is a very specially nice day indeed", and he bent down and stroked the little Prince's glossy head with his trunk. Something tickled his trunk and he peered down to see what it was.

"Aré Baba", he said "that is very fine indeed Chandrakantbaba. It looks like Pomegranate's tail feather. At what price did you purchase?" Chandrakant was deeply mortified. But of course that is the trouble with being a Prince; Princes have to bear even more mortification than ordinary people.

"It is the turban feather of the greatest Maharaja in the world."

"Ah yes, I see" said Mukund and regretfully he did see, for this was going to call for his going down on both knees today which he didn't mind in principle, only he was getting a little rheumatic. But there was clearly no avoiding it, so with a great elephantine sigh down he went.

"There your Royal Majesty," he said "I bend knee. I bend two knees for greatest Maharaja in the world."

Chandrakant silently counted ten then he said graciously, "You may get up faithful Mukund." He knew that it was getting difficult for Mukund to kneel down and he was fond of the old elephant. So you see in case you were getting the wrong impression about him, Chandrakant was not all bad, only about ninety seven per cent as such things are commonly reckoned.

"Listen Mukund, take me up in your trunk. I have to tell you something in your ear and it is difficult to shout from down here, besides which I don't want everybody to hear us." This, unlike kneeling, required no effort and Mukund good-naturedly swung the small Prince up.

"Only don't shout Baba. Last time you shouted in Mukund's ear his head was ringing."

Chandrakant was now sitting squarely on the elephant's neck and he bent down to tell him the secret of what had been revealed to him. Immediately Mukund began to shake and Chandrakant knew that he was giggling.

"Mukund. Do you know that I can punish you very cruelly."

"No, look Sahib Maharaja", he said. "I kneel." And Chandrakant had to hold tight as Mukund got down first on one knee and then on the other.

"I rub my head in the dust. Sign of respect", said Mukund but Chandrakant could see he was only doing this to hide his laughing. And all the time little squeals of laughter were escaping him. Chandrakant had to hang on to an ear, a position which excludes dignity, to prevent himself from falling off. For the second time he tasted royal mortification. At last Mukund had finished laughing.

"Tell me Your Royal Highness," said Mukund in a slightly strangled voice "how can I serve?"

"I want you," said Chandrakant, "to begin with, to tell the horses that I am their master and that they must recognise me as such and not kick me any more, under pain of death."

"Aré Baba", said Mukund pretending great astonishment. "But who will put them to death?"

"You. You elephants have always been faithful to me. If they disobey you must stomp on them. Squash one or two and the others will come round quickly enough." Perhaps ninety eight per cent.

The elephant said gravely, "Oh Baba, that is not a good thing to do. In India only the bad Rajas did that. Little men", he said. "Stomp; squash. No. How else I can serve, Baba?"

"That's all for now but I want you to come and tell them immediately and then we'll go to the other animals", said Chandrakant unheeding; but Mukund would not come with him, and when an elephant does not want to move there is nothing that you can do to make him move, so Chandrakant went to tell the horses about their new master himself. But they only laughed at him and jeered and one said, "Go and wave Pomegranate's feather somewhere else." They were wild primitive horses and said many rude things and Chandrakant turned away with angry tears in his eyes. He galloped away and headed for the river. On the way he crossed Billy the mad rhinoceros and stopped him. Billy who had been charging at the moving shadow of a branch now started charging at Chandrakant and when he heard him say, "Come and bow to me Billy for I am the leader of all the animals", Billy skidded to a halt within an inch of him panting and frothing, and then he tossed him into the air on his short horn and caught him on his back. Chandrakant scrambled off and found himself looking up into his mad, bloodshot eyes.

Billy pointed at all the trees with his ridiculous little horn and said, "I am the King of this realm. These are my minions. They sway and bow to me", and he pointed at the shadows dancing in the breeze. He lowered his head to toss Chandrakant again but Chandrakant galloped away. The horses would not follow him and Mad Billy wanted to toss him and even Mukund could not be budged by his orders. Bitter, bitter. If one could not be an absolute ruler what was the good of being a ruler at all.

He arrived at the bank of the river and stood panting down into his reflection which also panted. The feather was still there and it looked very fine indeed. There was, he decided, no point in wasting his time with creatures too dull to recognise their destined leader when he stood before them. What he must do was to find animals who *would* recognise him. But where to start and who to look for? He looked and looked at himself and the more he looked the finer his image appeared to him. The coat shone silver-white against the black so that he himself was dazzled. Suddenly an idea came. Since nobody else around here had a striped coat this must be a sign. He must look for other animals with striped coats. They at least would recognise him. He had to start somewhere and that is how it would be. To the first striped animal that he met he would offer the place of second-in-command and when he had a great enough following he would come back and subjugate this ignorant people. He would rule them kindly and in the end they would realise that it had been for their own good.

He went back to Mukund and asked, "Mukund where can I find other striped animals like myself?"

"Like yourself Baba?" Mukund thought

and thought. "In India Mukund was never seeing such a fine horse with stripes like moonbeams shining through the dark, but in India there is a great and beautiful being, the Royal Bengal Tiger. He has a coat with stripes and it is finer than anything you have ever seen."

"I don't like it when people tease me Mukund."

"But Baba this time I speak truth only. Go one time and see; but there are great rivers to swim. You must even cross a sea."

"I will swim rivers. I will cross seas to fulfill my destiny", said Chandrakant tossing his head as the wild horses did. As you can see Chandrakant was very earnest about all this and could not take any of it lightly, so Mukund for once forbore to smile, besides Chandrakant now seemed so determined that Mukund wondered whether he hadn't spoken too casually. True, the Royal Bengal Tiger had fine stripes and could teach Chandrakant something about true royalty. But what if he ate him first?

"Chandrakantbaba," he said gravely, "if you ever meet the Royal Bengal Tiger you must realise one thing: he is not like wild horses here nor like old elephants. He is also king. And if you want him to recognise Chandrakant as king Baba, you must behave like king. You must bend the knee first."

"I must bend the knee!" echoed Chandrakant incredulously; the idea that royalty had to bend the knee was so novel to him that he stretched his neck out to scan Mukund's face to see if he was serious.

"Yes Baba."

"But he must do it first if I am the greater King."

"No Baba, if you had been brought up in your true royal home you would remember that it is the greater king that bends

the knee first. More greater the king, more the knee is bending."

"Yes?" he asked and thought about this. He tried to imagine himself bending the knee. And this too was very novel. The picture just would not form in his head. Every time he tried to see himself flopping down on both knees it was the other shadowy animal, a bundle of stripes that came down first.

"Mukund, what does he look like?"

"Tiger?"

"Yes. Does he have a mane like me?"

"No."

"Can he run as fast as me or is he a slow-coach like you Mukund?"

"Baba, he runs. He runs like wind. Faster than wind he runs."

"Faster than the wind?"

"Tiger running faster. Wind like tortoise."

"And when he bends the knee. How does he look. I'm trying to make a picture in my head."

"I have never seen him bend knee."

"Never?"

"Never. It is not so easy Baba. Nobody who is knowing approaches Royal Tiger unless . . . unless he is true royalty. That is test for you, Prince Chandrakant. If you have bent knee he also bends knee to you, you will know Pomegranate is not mad. Then you are ready for being Maharaj."

"And if somebody who is not true royalty approaches him without bending knee?"

"Then that animal is made small pieces." Mukund's voice was quite definite.

"Always?"

"Always."

"So I may be the first."

"Maybe." This idea of being the first interested Chandrakant very much. It was as you may have gathered one of the ideas which interested him most in the world.

Again he tried to imagine himself bending the knee, putting his head down in the dust as Mukund did. But all he could see was a tall magnificent animal with a garden of moonlight and black shadows on his back and a royal red feather on his brow standing with his head high. Besides which he didn't want to drag that feather in the dust.

"Mukund, tell me some more about this Royal Tiger."

"He is very beautiful, Baba. He is so beautiful that if you see him in his forest you may want to cry. Have you ever seen anything so beautiful that you want to cry Baba?" Chandrakant thought about this. A memory stirred faintly in him. He tried to seize it but it evaded him.

"No I have never seen anything like that. I've never even heard of it. Tell me more Mukund."

"When he walks it is as soft as a cloud in the sky though he weighs more than Billy. When he runs it is still as soft as a cloud in the sky."

"Tell me more."

"At night his eyes shine like rubies."

"Like rubies?"

"Yes."

"Tell me more", for still Chandrakant could not see himself in any but his normal upright position.

"There is something that pleases him above all other things."

"What is that?"

"When he is not feared"

"Do people fear him?"

"People who have a little knowledge fear him."

"Always?"

"Always."

"Why Mukund?"

"Because he is relishing to chew them."

"Always?"

"Always. Only people who are also true royalty are not fearing him, and this he enjoys so much that he foregoes the chewing."

"Does he bend the knee then?"

"Perhaps there is something even greater than bending the knee."

"How can that be?"

Mukund did not answer.

"What is it Mukund?" asked Chandrakant.

"That is if he is looking into your eyes and is recognising you."

"And then I do not have to bend the knee?"

Mukund sighed. "Perhaps then it is not necessary to bend the knee. But Chandrakant Baba, you have to be very sure. You have to be very very sure that he is looking at you, that he is looking at you and smiling, that he is looking at you with love. Otherwise I tell you this: Bend the knee. Bend it quickly. Bend it before you are doing anything else." Mukund spoke with such gravity, with such emphasis that Chandrakant was seized by two separate emotions. One was very uncomfortable. The other was a great longing to

find himself before the tiger, to be recognised immediately, and to stand there with his royal feather waving in the breeze while the great cloud-footed animal looked into his fearless eyes and then bent his head and knelt to him.

More than anything in the whole world he wanted to be recognised for what he was: a great leader, a very great leader, the greatest leader in the world. And now that Mukund had spoken of the Royal Bengal Tiger he was very glad, for it confirmed what he had realised on his own: it was the animals with stripes who were the royalty of the animal kingdom. In that moment Chandrakant made an irrevocable decision. He would seek out this Royal Bengal Tiger. No other animal in the world could be his second-in-command.

"I must set out at once", he said.

"So be it", said Mukund sighing. For though he was very apprehensive for his Chandrakantbaba he was also relieved because it was clear that Chandrakant could no longer stay here. This colony of animals had become too small for him.

[To be continued]

REVIEW

A Study of Future Worlds, by *Richard A. Falk*. New York: The Free Press, MacMillan Publishing Co., 1975. 506 pages, \$15.

Compare the fundamental differences in the following two statements' attitudes to and perspectives of the international food problem. Both statements, by Henry Kissinger and Norman Borlaug respectively, were made in 1973.

No one country can cope with this problem. The United States therefore proposes:

—that a World Food Conference be organized under United Nations auspices in 1974 to discuss ways to maintain adequate food supplies, and to harness the efforts of all nations to meet the hunger and malnutrition resulting from national disasters.

—that nations in a position to do so offer technical assistance in the conservation of food. The United States is ready to join with others in providing such assistance.

The time has arrived when international granaries of food reserves, financed by all nations, should be established for use in case of emergencies. These granaries should be strategically located in different geographic areas of the world in order to simplify logistics and also minimize the danger of disruptive railroad, port and shipping strikes in times of emergency. These grain reserves must be available to all countries that need them—and before famine strikes, not afterwards.

Richard A. Falk quotes these as instances expressing the difference between the present world system of sovereign states and the coming one with a larger fulcrum of

operation. The multi-aspect movement from Kissinger's statist description toward, and beyond, Borlaug's statement is the enginery of this pivotal book.

The values which are given as the basis for studying this movement into the future are four: a global diminishing of violence, of poverty, of social and political injustice, and of environmental deterioration. Or positively stated: peace, economic health, dignity, harmony with nature. This quartet orients every important stage of the work.

A Study of Future Worlds is exactly what it indicates, the large promise of the book being realized through the author's humility, which allows him to receive and consider in an open way the teeming possibilities, ideas and sets of information his capacities, contacts and background make available. In consonance, the method of the study is designed to generate the widest and wealthiest view conceivable. A review of the approach and method would not only offer us a natural entry to the review of the book but may also show how surprisingly interesting methodology can be.

A liberal amount of energy is given to comprehensively describe the present global situation and its trends' and patterns' complex effects and counter-effects. (The analysis has a patience and sustenance throughout which distinguish it from most major works' repeated apologies for not having time to complete *this*, or the scope to investigate *that*. Dr. Falk just goes ahead and does it.) Then instead of proposing, in the accustomed manner, a singly seen utopia as the object of all readers' aspirations, the study---after a carefully described design-setting---discusses nine possible principle "images" of world order systems, alternatives to the present one which the race shows accumulating signs of outgrowing. Next, a "preferred world polity" is not only decided upon, it is detailed in a behavioral description quite satisfying to the expectations of imagination. A study of the transitional process necessary to develop from the present to the new formation, done in terms of a time frame reaching to the year 2000, follows immediately afterwards in one of the book's longer chapters. Here Dr. Falk takes seriously the perennial weakness of utopian studies which effortlessly dilate on what to collectively become and as effortlessly ignore how to become it.

Although this method is capacious enough to incorporate an ample treatment of the fields of the four values, a chapter on the world economy has been added. There readers will be fortunate in finding that the disturbing concentration of great power (overwhelmingly U.S. power, as the author shows) within the multinational corporations is revealed in a cutting analysis and discussion of their conglomeration and implications for a converging world order. A second concern handled with major attention, in addition to the rich-poor gap and many expected motifs, is the question of limits to growth which was introduced into such active consideration by the Club of Rome. Certainly the last chapter, "America's Stake in Global Reform", is an inevitability in a book as realistic as this, but I wonder if the economic material would have been more effectively integrated into the early

stages of the study. Nevertheless, its distinguished position of seriousness clearly shows this book is not contributing to the neglect of economic issues generally true of such studies outside the reins of Marxist assumptions.

The evolution of this altogether excellent approach to and methodology in the discipline we may call "global futures" began in 1966 when persons connected with the Institute for World Order in New York City decided to organize a group of scholars to contribute to the discovery and making of the dynamics of a warless world. By February 1968 the World Order Models Project (WOMP) had its first meeting in New Delhi, and five research groups representing West Germany, Japan, India, North America and Latin America began. (Can it only be coincidence, by the way, that on 28 February of the same year the international city of Auroville was inaugurated in south India?) Afterwards the constellation grew: Africa, the Soviet Union, the Scandinavian countries; then a Chinese and a Middle Eastern scholar became involved. From the group's first norm of war prevention, values soon came to include economic well-being and social justice—it was this inclusion which brought the tide of participation of scholars—and with the addition of ecological quality, the WOMP basis was formed. Eight additional values, such as diversity of life-styles, harmony, joy and creativity in social life, are mentioned but not elaborated as fully as the quartet is.

This book is one of those being written as part of Saul Mendlovitz' directorship of the World Order Models Project, with the background assistance of the Sponsoring and Policy Review Committee of WOMP/USA, whose members of considerable eminence helped develop the outlines of the "preferred world" proposed here by member-author Falk. WOMP's self-described task is to provide interdisciplinary, normative social research oriented to the future and concentrated on "the design of social change actions, policies and institutions". Out of this task were generated the criteria of presenting a round description, in behavioral and institutional terms, of the preferred future world; of studying its emergence in a time setting ending in the 1990s; and of taking the responsibility for elucidating a transition process, again in some political and social detail, from the present situation to the new order.

The author goes about his task of diamond difficulty in a consummate way. Emphasizing he is not predicting what will develop as in the spirit of futurology, but is rather narrating a possible and desired future that hopes, in the narration, to attract energy toward its realization. Dr. Falk then unfolds a world order based, not on the expected formation of a highly centralized and nation-dimming world government but, on a severalfold increase of non-state, transnational, regional and international agents and agencies; on a change in orientation—not an atrophy—of national functions; and on a marked, substantial structural change of the central guidance organ, now operating far too delicately as the United Nations. The discontinuity of these structural changes from those of the UN is given operational detail in a bureau to bureau tour within its four major systems: security, economy, human

development, ecological balance—embodying the WOMP values of global tranquility, wealth, opportunity, naturation.

One defect of present-time thought in this chapter is the lack of coordinative relation between the systems' bureaus—at least none seems described—which opens the structure to eager possibilities of conflict between the claims and objectives of each. For instance, counterproductive proposals by an economic bureau and a bureau of ecology would have to be resolved via the Coordinating Board's reports of such conflicting information back to its initiators. It would seem possible, by the 1990s, for a consultative sophistication to be reached so that bureaus would suggest action already known to be integral to other bureaus' work before sending the proposal to a general body for consideration. But even the world bureau must strike many of us as a coming anachronism; it is an active term simply because we cannot yet see the clarity of the new structures and their processes.

Yet Dr. Falk continually and genuinely reminds the reader and himself that these structures are not prescriptive, only indicative: the most important and powerful aspect of the situation will be an early beginning of a massive change of attitude, of awareness that can precipitate a supranational structure near the end of the century. This change of political consciousness is the first stage of the transition process, a process worked out in a very interesting manner.™

The five main constituents of transition are (1) the time stages, and (2) the type of propelling activity, (3) the realization of WOMP values, (4) the arenas of achievement, and (5) the world order achievements, during these time stages. The wisely tentative and fluid notation is presented in several versions. Here is a paraphrase of one:

(1) Stage 1: 1970s ('74-'84)	Stage 2: 1980s ('84-'94)	Stage 3: 1990s (94-'04)
(2) political consciousness	political mobilization	political transformation
(3) peace	prosperity, human rights	ecological balance
(4) focus: domestic arenas	focus: transnational arenas	focus: global arena
(5) nation-state system	modified nation-state system	WOMP/USA world system

Of course a most difficult requirement in the section on transition process is a discussion of how these stages can be negotiated from our present position of 1975. I don't have a strong impression of this part of the material beyond the expected principle that non-governmental domestic, transnational and regional elites and agencies will forerun and cultivate governmental change. It may not have been practically possible, however, for the author to go deeper into specificity.

Nothing of what has been said should be interpreted as a dissatisfaction with too much structure and not enough process thinking in the book, with the exception of the one

chapter on the preferred world order model. On the contrary, one of the cardinal qualities of *A Study of Future Worlds* is what I would call its seminar character: Dr. Falk unexhaustingly lives in the book with an enormous, diverse family of views on the tactics and turns the process is likely to undergo, revealing an acuity of psychological and political perception that spends the pages in penetrating companionship with the reader. This seminar quality is not only characteristic of the process material, but of the work's entire exposition. This is one book whose footnote commentary is as crucial and engaging as its text; and there is hardly a page where the main argument is not challenged (often very potently), qualified or complemented by a viewpoint from below. Richard A. Falk's fidelity of attention to the theories of colleagues and other ideas' self-sponsorship even suggests a scenario of how the book might have been written. First, the core argument—revised, refined and modulated—elaborated in the main text and then, successive workings each leaving a layer or casting of footnotes until, by the fourth ideative fertilization, the seminar is full.

It is this facet of the book which illuminates a very great quality—the collaborative stimulation of thought on forming a new world order. Not a few books stimulate thinking which vibrates into controversy. Without denying the value controversy can have, the much rarer and profounder initiation of an orchestral exchange can come from those whose catholicity of perception is moved by the awareness they are only one figure in the populace of Truth. This is such an initiative.

For example, it speaks of the planet's growth/anti-growth debate we mentioned earlier and makes one feel—as is suggested briefly in a late-page footnote—that there is a type of development that satisfies all the requirements of ecology and other life concerns, and that the full flourishing and richness of all life is upborne by a ceaseless growth. It is surely not the concupiscent technological and consumer growth we live in now. However, the question to explore may not be how to change from "growth dynamics to equilibrium dynamics", but what the attitude and nature of genuine growth is, a genuine technology that increases the fluency of a beneficial cycle with nature as it expands, a purpose and use of products that increases their scope as it increases the user's and the environment's benefit. Such seemingly unthinkable equations as these are nonetheless already implied in some lines of invention and in other emerging researches.

Related to this is the position that ecological improvement must be suspended until the needs of the poor are met—a declaration of third world countries which Dr. Falk acknowledges. Again, it may be that instead of the forced choice between ecological relief, and economic relief, instead, that is, of it being either/or, we will discover it can be both—or neither. For example, a profound solution to the problems of toxic industrial waste is not to invest in expensive effluent control equipment and consequently diminish available capital for helping the poor. It is to always explore the technological passage for converting toxic waste into its tail—recycled resources which save manufacturing capital and make it available for other uses.

There are many instances regarding values. In an important discussion on the interplay of values the book contemplates the possible necessity of the use of some violence to achieve other goals and then, in courageous honesty, comes to a stop before the question of

**how much violence is tolerable to diminish how much poverty or rectify
how much abuse of human dignity or overcome how much degradation
of the environment.**

Put that way, it is an impasse. It makes one ask if it is ever a question of degree: to violate (do violence to) anyone to any degree—even to make a shipment of food or a loan to countries conditional on their internal observances of human rights-- is to force their behavior which, ethics aside, is experientially recognized as the least effective way to encourage genuine change. Yet genuine change appears to be an absolute necessity for substantially progressing toward a global polity of WOMP values. So the question may actually become: What is the use of violence in the cosmic economy, if not to enforce such change? It seems to be for the purpose of destruction, not out of passion but the imperative for a clearing of the field, when things become too rigid to change and the new creation is ready, is pressing to take the field.

Dr. Falk candidly says human (and computer) reason cannot settle such questions, that there is no hope of solving anything fundamental in the future without a change in consciousness, and that "prospects for global reform patterned around the WOMP/USA proposals are bleak at this time". Yet despite his qualifications, disclaimers, and stated uncertainties there is a quality in the book that radiates a kind of inevitability about the process cohering toward this future world—a process we are now standing in and may consciously move within - that enters the being of the reader.

Ronald Jorgensen

Formerly a New York based consultant for design and development of behavioral change, Ronald Jorgensen presently does writing and editing work. Now in residence at the Sri Aurobindo Ashram, his reviews and articles on world affairs, education, and the development of Auroville have been published in several ashram-related journals.

FOCUS

SPIRITUAL VALUES

The basic quality, the life values, and the character of a people emerge at crisis point. We are being tested now in the crucible of desperate need. To solve our internal problems and to contribute to the solution of world problems, we need new, more spiritual values to live by. Nothing else can produce those necessary changes in consciousness which transform attitudes of mind and heart and determine action.

Mary Bailey

World Goodwill is a voluntary association of men and women which is working to establish true human relations and to solve humanity's problems through the constructive power of goodwill, a paraphrase of life in action. The association helps with some of the affairs of *World Union* journal in New York and the United States generally. It is one of the activities of the Lucis Trust with offices in New York, London and Geneva. We have received a folder from them focused on the theme of values, and give the text here.

VALUES TO LIVE BY TODAY

The fate of men and nations is determined by the values which govern their decisions.

These are years of significant choice for the peoples of the world. It is a time of re-evaluation. A value is the relative worth we assign to some aspect of daily life, or a recognised intrinsic excellence or usefulness. Such values may be matters of opinion and therefore debatable. But many values in human life are basic to the "general welfare of all the people" and are guiding principles upon which the daily round and common task can purposefully be based. The principles set out in the United Nations Universal Declaration of Human Rights are a constant reminder to all the people of the world of the fundamental goals and purity of motive that influence decisions.

Today in a rapidly changing world we see a basic confrontation between the old and the new: crystallised, outworn forms and progressive ideas, self-interest and human welfare, nationalism and a planetary consciousness, or—material values and spiritual values.

Material values confine an individual, a group or a nation within limits determined by

the form of life created to serve its own interests. Forms may change, but if motives of narrow self-interest remain, nothing of value to human culture and civilisation results.

Spiritual values relate to the enlightenment, the freedom and the creative growth of the human race. They promote the innate human tendency towards synthesis and wholeness. They expand rather than limit the horizon of human vision and capacity. They can be symbolised as an upward spiral of infinite potentiality.

The spiritual values of greatest importance to us all, whatever nation we represent, are those that lift us out of our self-centred, self-created treadmill. Self-interest benefits no one, including oneself, so interdependent and interrelated has human society become.

The "sacrifice of selfishness" would release new values into national and international life. It could end the arms race, now perpetuated by the power and profit motive, and lead the way to world disarmament and world peace, visioned and provided for in the Charter of the United Nations.

Sacrifice of selfishness provides for the sharing and contribution of all parts of society in the growth and prosperity of the whole. It provides for responsibility, concern and commitment, for wholeness in attitudes and actions, for a new perspective on life and its true values. The true values of the peoples of the world lie in a few principles or qualities: unity, tranquility—social harmony, security, freedom, and a general wellbeing "for all the people". In such a framework, a sense of responsibility develops side by side with the rights and freedoms to which all are entitled; mutual trust and respect provide the safeguard.

Each nation, great or small, can play its part. Focused, determined, enlightened public opinion is the most potent force in the world and can produce the needed moral leadership. Let our renunciation of selfishness and of materialism light the way into a better future for mankind.

THE SACRIFICE OF SELFISHNESS

The hindrances to a new and better world order for all mankind can be summed up in one word, *selfishness*—national, racial, political, religious, economic and individual selfishness.

New values to live by are desperately needed if our planet as we know it is to survive. Selfishness can be transcended and the vision of a better world can become factual. The time has come in this interdependent world for individuals to submerge their personal interests in the good of the group; for the group or groups to merge their interests in the national good; for nations to relinquish their selfish purposes and goals in the interests of right international relationships and the good of humanity as a whole.

There is a growing tide of aspiration towards new vision for better ways of life for all men everywhere in the world. Human consciousness is opening to spiritual impression and to the realisation that there are desirable spiritual values to be built into every aspect of life, superceding the materialism which has controlled mankind for centuries. These values concern essential attitudes of mind and heart which determine actions and create the circumstances of daily life.

The sacrifice of selfishness would increase the bonds of understanding between the peoples of the world, through the practical substitution of international cooperation, mutual tolerance and sharing between peoples and nations. It can liberate the men and women of all nations from limitation into freedom to expand mentally and spiritually.

HUMAN VALUES IN DAILY LIFE

The time must come in the history of the human race when so large a number of people have awakened to the finer spiritual issues and values that the old attitudes and activities will be rendered eternally impossible on a large scale.

The goal of the new world order is surely that every nation, large and small (with the minorities given equal and proportionate rights) should pursue its own individual culture and work out its own salvation, but that each and all should develop the realisation that they are organic parts of one corporate whole and should consciously and selflessly contribute to that whole. This realisation is already present in the hearts of countless numbers all over the world; it carries with it great responsibility. When intelligently developed and wisely handled it will lead to right human relationships, economic stability, based on the spirit of sharing, and a new orientation of man to man, of nation to nation, and of all to that supreme power to which we give the name *God*.

Translated into national terms, these realisations take the conflict and competition out of the many facets of society. While each group fights for itself and its own self-interest there can be no "social harmony", no tranquility, no security or unity, no freedom or wellbeing.

The fundamental human value needed today as the basis for a better life in the society in which we live is the simple, practical use of the energy of *goodwill*. Goodwill is an inclusive, cooperative attitude of mind; it is "love in action"; it fuses the heart and the mind into a condition of wise and creative intelligence; it encourages justice and integrity in those with influence and authority. It is truly the cornerstone of a human society responding to the values of the new age.

Let us support in thought and action those who act with goodwill on behalf of "the general welfare of all the people".

ORGANISATIONAL ACTIVITY

World Union Centres

Bangalore "The Seas and World Union", a crucial but stubborn issue of international activity, was the subject of an interesting talk given by Sri Haneef Jawaaid on January 18th. After giving expected statistics of the ocean's great predominance over land masses he revealed that 78 percent of the volume of world trade and 68 percent of its value is carried on the back of the sea. With undersea petroleum exploration only in its infancy, one fifth of all oil produced is already barrelled from offshore; and veins of minerals in possibly far greater reserves than those mined out of the land in the last few thousand years will vastly

increase the importance of principles regarding custodianship of the ocean.

In a brief historical resumé Sri Jawaid surprisingly disclosed American president Thomas Jefferson (in office 1801-1809) as the first substantial inhibitor of free navigation. It was he who extended U.S. jurisdiction three miles into the young country's coastal waters—the farthest distance a cannonball could travel. That launched the movement by which aquatic boundaries now reach 200 miles out from some nations' beaches. In the flux of this, of disputes on the application of the principles "innocent passage" and "continental margin", and of a cod war (Iceland-England), lobster war (Brazil-France) and tuna war (Equador-U.S.), the difficulties of using the sea as a common resource and a traveling surface are evident.

However, it is the ecological dimension of the ocean which may force its planetary nature into men's provincial perception. Here Sri Jawaid documented the boundaryless, mortal damage to aquatic life that supertanker oil spills, for example, have caused. After closing his examples with the catastrophic destruction a leaking plutonium-laden ship might tender, he implies that humanity is being attracted toward an active unity only when the margin has nearly been worn through.

February 1st marked an important meeting of the Bangalore centre, for which those present had concentrated a good deal of energy on analyses of the World Union movement and recommendations for its growth. Although far too detailed and thoroughgoing to recount here, their effort included a scrutiny in relation to World Union of characteristics common to the major types of organisational movements and their successful strategies, a study of the types of members which constitute World Union, the formation of three committees to work on specific aspects of development, and a yield of suggestions such as: World Union work should now begin to seriously involve different strata of (Indian) society; lectures and discussions *alone*, however fine intellectually, are passively inappropriate, and work in fields such as education and social regeneration must now be organised; however, projects or activities begun need to be viable and well started, well executed. Bangalore's representatives will have already brought these proposals for the executive committee meeting's consideration on 21 February by the time this "Focus" is printed.

Bhanderhati At their meeting, held in the Mandra Lalmohan Sreti Public Library, Sri Samar Basu spoke on World Union and Sri Aurobindo's social-political works for about two hours. This talk was attentively received, and it was thereafter decided that monthly lectures on these writings, *The Human Cycle* and *The Ideal of Human Unity*, would be held.

Eastern Region The name and style of the Education for National Reconstruction Coordinating Committee, which was established at Rishra teachers' convention in 1975, was changed to Sri Aurobindo Siksha Samsad in a meeting on 13 January 1976. The chief advisors of the Samsad will be P. V. Mallick, member of the State Planning Board, West Bengal and Mohit Kumar Bannerjee, vice-president, All-India Federation of Educational Associations.

Nanjangud A professor of philosophy from Manasagangothri, Mysore explained the concept of world unity at the January 31st meeting. It was a major address, and Dr. K. B. Ramakrishna Rao did not glide over the problem of war and its effect on attempts to develop a world order. However, instead of criticising the United Nations he described the changes to which member states must surrender for the liberation of its full function and capacities,

extending his point to declare this decrease of national egoism as the primal need.

Nanjangud centre also held a Human Rights Day observance late last year with several speakers attempting the difficult task of harmoniously relating rights, restrictions, and responsibilities. The concluding speaker affirmed legislation is not the father of human rights, nor even, often, the midwife: the fundamental change is in persons' attitudes; it makes legislation possible later.

Shillong Shillong, on the 1st of February, decided to begin a project of membership expansion. A few weeks earlier on 13 January, the co-editors of a Canadian (British Columbia) journal named *Integrity*, Chris and Joy Foster, were guests in a discussion meeting with the participation of Sisir Kumar Ghosh. *Integrity* is a publication "dedicated to true values". Also, Mr. Vinode Goenka has been elected joint secretary of the centre.

Sion, Bombay Both World Union and Auroville were subjects of a speech which the honorary lecturer of World Union, Professor M. V. Ramchandran of Bangalore, gave on January 10, 1976. The truth of the spirit which will actualise our already existing unity is, in his conviction, the power of Love—a power overlooked by the mental predominance of modern man's development. He sees Auroville as the concretisation of that actuality in an open experiment of international community. Auroville's success, even as only the one town it is, would no less fulfill the aims of the United Nations as a concentrated, difficult, full-time living, microcosmic pulsation of the world's coming birth in unity.

Uttarpara The regular centre and the women's wing met on January 10th and 17th respectively, when discussions covered the following: the proposal of the World Constituent and Parliament Association meeting a draft constitution for a world government, expected to be decided upon by participants in a 1977 planetwide assembly; the relation between Christianity and Vedanta; and in the women's wing, the Mother's sadhana.

During the past month or so, similar ideas for a new vibration of World Union work have somewhat synchronistically gained expression in several centres: Butwal centre and World Union International in the February "Focus", Bangalore and Shillong centres in this "Focus". It is a moving away from the exclusivity of lectures, discussions, articles and books. There is almost an impatience, in the good sense, to begin individual and collective inner work, and outer projects in areas like education and social effort, that will help arrive at and express human unity even locally and in the day's life; to communicate with other groups and other social strata of people, and so to naturally enlarge and diversify the centre membership.

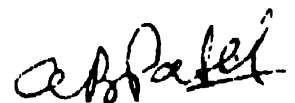
This unplanned synchronisation of centres is not an accident nor a coincidence, but an indication that such a dynamis is in our atmosphere and is pressing on all the centres whose time to express it is rapidly coming even now. These dynamic forces and ideas sweep far beyond the official campaigns of the country, for the nation has more to do than stabilise her political integrity and develop her citizens' economy. Mother India is intent on her full integration, her actual unity that will realise the nation-soul in 600 million people. When India is truly One, the world will accept her message and a resistance to global unity will be broken.

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- 259 Mr. P. Driver
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260. Mr. S. P. Master
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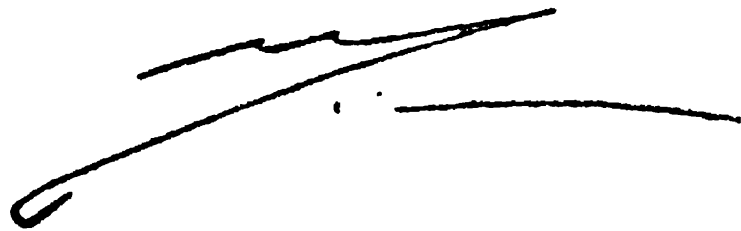
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General Secretary
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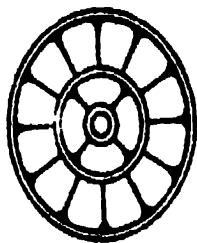
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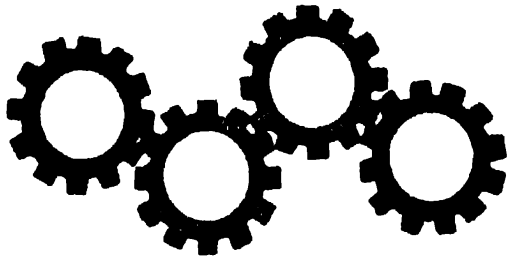
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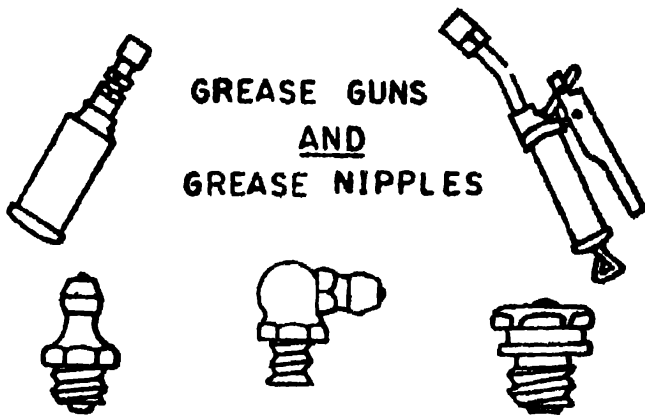
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EDITORIAL

Franglais

In outlawing a considerable number of English words and expressions—nearly 250 of them—from the French language, the government of France has taken a retrograde step. This action interferes with the natural growth of French as a powerful language and is likely to demote it from the high position it has occupied internationally and on the European continent. It leaves the field clear for English to become the undisputed world-language in all domains. Already steadily losing ground to the more open and vibrant English, French will only be further stultified by these legislative measures.

Apart from the fate thus evidently imposed on the language itself, the trend of thinking which such an action reflects is disturbing. An attitude which allows free interchange is indispensable not only for the health and expansion of a language but also for the integration of the peoples of the world.

It has been seen in Tamil Nadu during the last few years to what absurd lengths such "puristic" fanaticism can reach. Here, too, rigorous attempts were made to delete all "foreign" Sanskrit words and English terms from the Tamil language. An archaic vocabulary was sought to be revived, and this old, powerful language was in danger of being reduced to an artifact and curiosity.

To impose restrictions such as these on a language is the most certain way to ensure its death as a medium of expression and communication of human thought and feeling.

The Health of Communism

Contrary to the belief of the high-priests of communism in Moscow, the recent declaration of the French Communist Party, that the dictatorship of the proletariat is not indispensable for the establishment of the communist ideology, should be regarded as a positive step in the growth and acceptability of the doctrine by larger sections of humanity. World conditions have changed vastly since Marx's original enunciation of the doctrine and an adaptation to new conditions is always a sign of health. Communism is no longer a movement of the working classes alone.

Some of its basic principles are truths that are today accepted by progressive sections of mankind, whether these principles are termed communist or not. It is the element of compulsion that is abhorrent to the awakened mind and spirit of man. This must be overpassed, along with the insistence on one-sided views such as matter as the sole reality. Seen from a larger perspective, it becomes evident that communism is undergoing radical changes in content and form in the crucible of life-experience.

The Illusion of Quantity

Many scientists and cosmologists have increasingly tended to emphasise the relative insignificance, or at least the lack of uniqueness, of planet Earth in the incomprehensible vastness of the universe. This tendency, spawned by the growing comprehension of the physical cosmos, acquired added impetus through the experience of the lunar astronauts who spoke of the Earth as a speck—though a beautiful one—in the universal panorama.

It must be remembered, however, that size, "quantity", does not determine value. From the perspective of evolution and the destiny of man, the Earth is truly more significant than any other planet. And this is because that of all the planets and planes of existence, the Earth alone is infused with the divine spark, the soul, which underlies the principle of evolution. Evolution, development of consciousness, is possible only on Earth. Authentic spiritual and occult tradition—which embraces the totality of creation in its vision—is emphatic that any being—even a god—who wishes to develop in consciousness, to evolve further on the scale of existence, must take birth on Earth. This is the crucial importance of Earth and the truth of its centrality in the cosmic vastitude.

M. P. P.

KUNDALINI: SEX, EVOLUTION AND HIGHER CONSCIOUSNESS

John White

It is well-known that sexuality and spiritual experience have traditionally been linked in the literature of mysticism. Religious ecstasy seems strikingly similar to erotic excitement in the accounts of saints and holy people who have spoken of enlightenment—i.e., knowing ultimate reality or, in their usual term, God—in language that resorts to sexual imagery.

Such imagery is widely assumed to be figurative. But there is another point of view, articulated primarily by the Indian yogi-philosopher Gopi Krishna, which maintains that such language is literal and holds fundamental importance for research in transpersonal psychology. There is, Gopi Krishna maintains, a direct physical linkage between sexual and spiritual experience—the real “missing link” of human evolution. The American spiritual teacher Ram Dass aptly expressed it in the original title to *Be Here Now*, which was *From Bindu to Ojas*. As Ram Dass explained it: “Bindu is sexual energy and [ojas] is spiritual energy, and it’s the transformation of energy within the body through the conversion of a form of energy . . . it’s called the raising of kundalini. . . .”¹

This ancient yogic concept, recorded in literature and oral tradition, will come under scientific scrutiny by the All-India Institute of Medical Sciences in New Delhi. At the International Congress of Physiological Sciences, held in late 1974 at New Delhi, India’s Minister of Health and Family Planning, Dr. Karan Singh, announced that the Indian government

John White is a writer and teacher engaged in consciousness research. From 1972 to 1974 he was director of education for the Institute of Noetic Sciences founded by former astronaut Dr. Edgar Mitchell to investigate the nature of consciousness and human potential. Mr. White is the editor of a number of books, including The Highest State of Consciousness, What is Meditation?, Psychic Exploration (for Dr. Mitchell), and two other anthologies reviewed in the January 1976 World Union. His most recent publication is a book-length examination of the Transcendental Meditation movement. Mr. White’s articles have appeared widely in both popular and scholarly periodicals, and he serves in an editorial capacity for several journals.

1. Ram Dass, “Baba Ram Dass Lecture at the Menninger Foundation”, *Journal of Transpersonal Psychology* 2, no. 2 (1970).

would conduct a long-range study of kundalini yoga to seek scientific corroboration for what tradition has maintained for centuries. Gopi Krishna will serve as one of the primary consultants and experimental subjects.

With the prospect of a major development in consciousness research before us, and because there is increasingly wide public interest in (and, apparently, misconception about) the concept of kundalini, it seems appropriate to attempt a summary of Gopi Krishna's views. These views will have major influence on the Indian government study, and can be found in five books² and numerous articles.

Pandit Gopi Krishna, now in his seventies, lives in Srinagar, Kashmir. Pandit is an honorific term meaning "learned man", so Gopi Krishna should not be thought of as a contemporary guru. He says that he seeks no followers, accepts no disciples and makes no demands for asceticism. Rather, his mission is to arouse interest in the nature of enlightenment, and to do this he wants co-workers, not devotees. Most important, he says that the truth of his observations about a potent biological link between sex and higher consciousness—the motive force behind all spiritual and supernormal phenomena witnessed in history—should be tested by trained scientists and scholars, using the principles, methodology and (insofar as possible) technology of science.

The essence of his claims is threefold: first, he has discovered that the reproductive system is also the mechanism by which evolution proceeds; second, the religious impulse is based in inherent evolutionary impulses in the psyche; and third, there is a predetermined target for human evolution toward which the entire race is being irresistably drawn. (Whether humanity will arrive there or extinguish itself is another matter—one which Gopi Krishna says is the fundamental motive behind his efforts to demonstrate our "divine destiny".)

Kundalini is the key term in Gopi Krishna's theory of evolution. Coming from ancient Sanskrit, it means "coiled up" like a snake or spring, and implies latent energy or potential to expand. Gopi Krishna often translates it as "latent power-reservoir of energy" or "psychosomatic power center". Kundalini, he claims, is the fundamental bioenergy of life, stored primarily in the sex organs but present throughout the entire body. Although this potent psychic radiation is normally associated with the genitals for simple continuance of the species by providing a sex drive (the physical basis of what Freudian psychology calls libido), kundalini is also the basis for the attainment of a higher state of consciousness. Its potency is our potential. Such a state, if widely attained, would mean a new species of humanity—

2. Gopi Krishna, *Kundalini* (Berkeley: Shambhala, 1971); *The Biological Basis of Religion and Genius* (New York: Harper & Row, 1972); *The Secret of Yoga* (New York: Harper & Row, 1972); *Higher Consciousness* (New York: Julian Press, 1974); and, *The Awakening of Kundalini* (New York: E. P. Dutton, 1975).

a higher race. Thus kundalini—the bridge between mind and matter—can be the evolutionary cause of creation as well as procreation.

Kundalini is traditionally symbolized in Hindu, Vedic and Tantric texts as a sleeping serpent coiled around the base of the human spine to indicate its close proximity to the sex organs. The concept is not limited to Indian literature, however. It has been described in the ancient records of Tibet, Egypt, Sumer, China, Greece and other cultures and traditions, including early Christianity. The Pharaoh's headdress, the feathered serpent of Mexico and South America, the serpent in the Garden of Eden—all are indicative of kundalini, Gopi Krishna says.

The source of the "serpent power" is *prana*, a primal cosmic energy outside the electromagnetic spectrum and other forces known to official Western science. However, many prescientific and unorthodox scientific and paranormal phenomena are derived. Acupuncture calls it "chi", the Greeks wrote of "ether", Christianity terms it "the holy spirit", Wilhelm Reich named it "orgone" and Russian psychic researchers have their "bioplasma". Dozens of more terms could be named.³ Apparently these are different labels for the same basic energy that permeates living organisms and is the source of all vital activity, including thought, feeling, perception and movement.

"Surrounding and permeating the gross tissues of the body," Gopi Krishna writes in a forthcoming book, *The Dawn of a New Science*, "a living electricity, acting intelligently and purposefully, controls the activity of every molecule of living matter. It carries the life principle from one place to the other, energizes, overhauls and purifies the neurons and maintains the life-giving subtle area of the body much in the same way as the blood plasma maintains the grosser part."

This vital essence is extracted by the nervous system from surrounding tissue in the form of an extremely fine biochemical essence of a highly delicate and volatile nature. In humans, this essence—existing at the molecular or submolecular level—especially focusses itself in the sexual organs, where the kundalini process begins.

There is a subtle but direct connection between the brain and the organs of regeneration via the spine, Gopi Krishna maintains. It serves as the channel for transforming sexuality to spirituality. Through certain techniques known and practiced since ancient times, the kundalini energy can be aroused and guided up the center of the spinal cord (*sushumna*, in yogic terminology) to a dormant center, called the Cave of Brahma (*Brahmarandhra*), in the brain's ventricular cavity—the site of the entryway to the seventh *chakra* (explained below). This "living electricity" or "superintelligent energy", as Gopi Krishna sometimes calls it, is an ultrapotent, high-grade form of bioplasma—concentrated prana. But the tech-

3. Lawrence Beyer, "Quantum Physics and the Paranormal", *Astrologia* 1, no. 2 (1975)

niques for controlling it are extremely dangerous—equivalent, figuratively speaking, to letting a child play with a nuclear reactor—and should be undertaken only under the guidance of a proven master of that tradition.

The nature of the chakras in yogic physiology is not clearly agreed upon by modern interpreters. The American psychologists Robert Ornstein, author of *The Psychology of Consciousness*, and Sam Keen feel that they are strictly metaphoric, lacking any physical reality. Others such as *World Union* editor M. P. Pandit in his book *Kundalini* and physicist William Tiller of Stanford University maintain that chakras exist in the “subtle body” of man—sometimes called the astral or etheric body—and influence the physical body through the endocrine system, with which they correlate at a higher level of physical existence.

Gopi Krishna, however, declares that chakras are in fact nerve plexuses, observed directly in the body through clairvoyance by ancient yogis. There are said to be six major chakras along the cerebrospinal column while the seventh (termed *Sahasrara*), Gopi Krishna says, is not merely a site in the cerebrum below the fontanelle, as is commonly thought. Rather, the seventh chakra is the entire brain itself. In a personal correspondence he wrote: “The seventh centre in the brain is not actually designated as a ‘chakra’ but as ‘Sahasrara’ in the Tantric books and ‘Usha-Nisha-Kamala’ in the Buddhist texts. It is often shown surrounding the head in the statues of Buddha, more or less like a cap. In this sense ‘Sahasrara’ refers to the cerebral cortex and, in fact, the whole of the brain. This is obvious from the fact that once Kundalini enters into the Brahma-randra . . . the whole of the cranium is illuminated and a new pattern of consciousness is born.”

From its repository in the reproductive organs, a fine stream of living energy filters into the brain as fuel for the evolutionary process. As the energy moves upward, it passes through various chakras along the central channel of the spinal cord into the topmost chakra in the brain. This does not happen in every case—in fact, it is quite rare for the kundalini process to be carried to completion—but the genetically-ripe person to whom it happens experiences a golden-white light within his cranium. Apparently this is the same light which is visibly seen by people as the aura or halo around saints and highly-evolved sages.

The flow of kundalini into the brain has been described by mystics as “ambrosia” and “nectar”, giving rise to exquisite sensations similar to those of orgasm but surpassing them by many orders of magnitude. The sensations are felt most intensely above the palate in the midbrain, and in the hindbrain in a descending arc parallel to the curve of the palate. This is known in yoga physiology as the *Sankini*, the curved duct through which the bioplasma passes into the brain.

Kundalini is at work all the time in everyone, and is present from birth in mystics and seers, but in most people there is only a “dripping” rather than a “streaming”. This upward

streaming—which is a biological restatement of what Freud apparently meant by the term “sublimation of the libido”—explains the source of an artist’s or an intellectual’s mental creativity. Beyond that are those rare people whom Gopi Krishna calls “finished specimens of the perfect man of the future”, such as Buddha, Christ and Vyasa. In them we see “an incredible combination of factors, both favorable heredity and cultural readiness, which produced those who, endowed with a superior type of consciousness and in possession of paranormal gifts, amazed their contemporaries with their extraordinary psychical and intellectual talents which [ordinary people] ignorant of the Law [of evolution] ascribed to special prerogative from God”.

Variations in the size of the energy stream determine the intellectual and esthetic development of an individual, geniuses having a comparatively larger volume of bioplasma streaming into the brain. The wide variation in types of genius depends on the particular region of the brain which is irrigated and developed. Thus, through certain occult techniques and spiritual disciplines, an individual of normal intelligence can accelerate the evolutionary process to attain the stature of an intellectual prodigy and beyond—to genius. This concept directly challenges current notions that intelligence is basically determined at birth by one’s genes.

Prana, the fine biological essence, is not itself consciousness. It is only the means of nourishing our consciousness-receiving equipment, the nervous system—our link with universal consciousness. During the kundalini process, the entire nervous system undergoes a microbiological change and is transformed, especially the brain. The result of a fully awakened and developed kundalini is both perceptible changes in the organism and a new state of consciousness—the cosmic consciousness of mystics and enlightened seers. This vital awareness of unity with God, Gopi Krishna says, is the core experience behind all the world’s major religions, and is the goal of all true spiritual and occult practices. Man has an innate hunger for this state of paranormal perception. Moreover, bountiful nature has provided the means for achieving it: kundalini, the biological basis of religion and genius.

This is the “secret” behind yoga and all other spiritual disciplines, esoteric psychologies and genuine occult mysteries. It is also the key to genius, psychic powers, artistic talents, scientific and intellectual creativity, and extreme longevity with good health. (An age of 120 was commonly achieved among the ancient illuminati, Gopi Krishna says, and an age of 150 is quite probable in the kundalini-altered future.) But if improperly aroused, without right guidance and preparation, kundalini can be horribly painful and destructive—even fatal. Unsustained by a sensible, healthy manner of living—meaning regulated and balanced, not ascetic or orgiastic—kundalini can turn malignant and become the source of deteriorating health, terrible bodily heat and pain, many forms of mental illness, and even sudden death. In physiological terms, the pranic stream has gone astray into one of the two side channels of the spinal cord (the left side being called *ida* and the right side *pingala* in yogic physiology).

The pranic stream, Gopi Krishna says in *The Dawn of a New Science*, is affected "by every shade of passion and emotion, by food and drink, by environment and mode of life". It is altered by desire and ambition, by conduct and behavior and, in fact, by all the thousands of influences, from the most powerful to the slightest, that act on and shape life from birth to death. Thus the need for balanced, moral living is based on biological imperative.

There is another condition, too, even worse for humanity. Kundalini-gone-astray has been the cause of evil geniuses in history such as Hitler. However, in such cases the kundalini energy has been active since birth, as with all geniuses. Their lives are usually so filled with difficulties that the kundalini energy can become malignant if the finer qualities necessary for psychological stability have not been made a part of their upbringing. Lack of these finer traits constitutes a built-in safeguard barring access to higher levels of consciousness. Short of that, though, the serpent energy can indeed turn venomous and from a born genius produce a Rasputin, a Hitler.

Knowledge of kundalini, Gopi Krishna says, is the only real means of preventing history from ending in either the bang of nuclear holocaust or the whimpering slow death of an overpopulated, starving, resourceless planet. His writings envisage a new structure of human society, a new social and political order to enable the entire race to devote itself to the development of the powers and possibilities latent within. "The only way to safety and survival lies in determining the evolutionary needs and in erecting our social and political systems in conformity with those needs", he says. All reality is governed by one mighty law that is simultaneously biological and spiritual: Thou shalt evolve to a higher state of consciousness. This law of evolution can be objectively demonstrated in people with unquestionable proof, using the techniques and technology of science, as the kundalini process. "The awakening of kundalini is the greatest enterprise and most wonderful achievement in front of man."

That is a vast claim, and most neurophysiologists and psychologists will probably regard it as simplistic, if not delusional. After all, others from both East and West have talked and written about kundalini since earliest times. But Gopi Krishna—who makes clear that he has only rediscovered an ancient tradition—is also a man of science. In that regard he says something that has not been said before: kundalini can be scientifically verified in the laboratory to prove the essential truth of religious tradition. We can get objective evidence that will show what has been the major claim of religious and spiritual teachers throughout history—namely, that man was born to attain a higher state, a state of union with the divine. Until such proof is available, Gopi Krishna says, don't believe what I say—just do the research.

How did Gopi Krishna come to have such a radical message? What are the sources of knowledge for this man who flunked out of college, lived simply as a husband and father,

and worked most of his life as a minor civil servant in the Indian government? The answer is: personal experience and scholarly research.

In 1937, after seventeen years of faithful meditation, Gopi Krishna awakened the kundalini force. In his autobiography he writes: "There was a sound like a nerve thread snapping and instantaneously a silvery streak passed through the spinal cord, exactly like the sinuous movement of a white serpent in rapid flight, pouring an effulgent, cascading shower of brilliant vital energy into my brain, filling my head with a blissful luster. . . ."

What began during meditation that Christmas morning was the development of a higher state of consciousness in him. But the process was far from complete. What followed were years of hell—periods of severe ordeal when the changes being made in his nervous system caused enormous pain, prolonged sickness, near-death, bewilderment and self-doubts about his sanity.

Slowly, carefully, he began to conduct experiments in the laboratory of his own body, observing the sometimes terrifying effects as he encountered the mysterious bioenergy. "I was destined to witness my own transformation . . . attended all along by great physical and mental suffering. But what I witnessed . . . is so contrary to many accepted notions of science . . . that when what I have experienced is proved empirically there must occur a far-reaching, revolutionary change in every sphere of human activity and conduct." The transformation included the spontaneous appearance of psychic, intellectual and literary powers.

Local gurus and holy men were unable to give Gopi Krishna any relief or understanding, so he undertook a reading program through the literature of religion, psychology and occultism. He found that kundalini was recognized at least 5000 years ago, but was always a closely-guarded secret recorded in veiled language and allusion that made little sense to someone who hadn't had personal experience of it. Like acupuncture, which was also known that long ago, this knowledge had been lost to modern man. But, Gopi Krishna says, it can be recovered and grounded in scientific concepts and terminology through laboratory research and scholarly studies of the thousands of still-untranslated old texts dealing with kundalini. Thus what has been recorded until now in occult terms will be demystified and explained in plain, simple language.

How might the reality of kundalini be shown? First, a person in whom it is fully developed will clearly be a genius. New knowledge will come from him—knowledge such as Gopi Krishna himself offers that elegantly unites the whole psychic/occult/spiritual scene of ancient tradition with Darwin's evolutionary theory and the transpersonal psychology arising from Freud, Jung and Maslow.

Next, as the kundalini process transforms a person, the nervous system and brain

undergo changes that will be observable (although the necessary instruments for observing them may still be only on the drawing boards).

Third, the "food" which the body uses to nourish the nervous system during transformation comes from the sex organs — the "essence" of seminal fluid in men and what Gopi Krishna calls "the erotic fluids" in women. (Some people mistakenly believe that Gopi Krishna limits the kundalini process to men alone because he sometimes writes of semen or seminal fluid, but this is a misunderstanding on their part.) Thus the reproductive organs increase their activity dramatically, producing many times more copiously than usual. This, incidentally, explains why ancient paintings and statuary sometimes show men—even a Pharaoh and an Egyptian god—in meditation with a full erection. This is not meant by the artist to be erotic at all, Gopi Krishna says, but rather is a frank and literal depiction of a biological fact about kundalini.

This fluid sexual essence, existing at the molecular or even the atomic level, streams from the reproductive organs through neural pathways into the spinal canal and then upward into the brain. This can be verified by a spinal tap at the time the phenomenon is occurring.

The blood stream also carries nerve food during this organic transformation. Hence the composition of the blood changes due to the awakening of kundalini, and ought to be examined in any research program. Heart activity (pulse rate) and other internal organs undergo radical changes. Likewise, perception, digestion and elimination change dramatically—still more clues to look for in the full spectrum of physical-mental-behavioral transmutations that necessarily must occur as nature prepares the organism through a total cellular reorganization for a higher state of being.

These are matters which can be objectively determined by neurophysiologists and medical people. In addition, the person will have high moral character and other traits typically associated with spiritual masters, such as psychic and literary talents. (Gopi Krishna says in his autobiography, *Kundalini*, that he was surprised to find himself at age 50 spontaneously writing poetry in nine languages, seven of which were unknown to him. He had never taken any interest in poetry nor attempted any literary performance, he claims, yet long narrative poems in rhymed metrical verse would impress themselves on his awareness so quickly that he could scarcely write them down.)

What about celibacy? In growing to higher consciousness, is it necessary, as some claim, to abstain from sex and to "mortify the flesh"?

From Gopi Krishna's point of view, the answer is a firm no—with one reservation. Since he himself is married and has three children, he strongly disagrees with those who regard sexual contact as detrimental to spiritual evolution. Moreover, he points out that during the Vedic Age thousands of years ago, when many of the great yogic scriptures were

first written, several hundred inspired sages were recognized as enlightened men, and in almost every case they were married and had children.

Gopi Krishna feels that an enlightened person can enjoy an active sex life up to an age of 100—and even beyond. But he emphasizes the need—arising from the biological laws of spiritual evolution—of basing sexual activity on love and respect, while avoiding immoderate or promiscuous sex.

Generally speaking, he says, celibacy is contrary to nature, since enlightenment is an evolutionary process, with heredity playing an important role by stamping the genes of the enlightened so that their biological gains through spiritual disciplines can be passed to their progeny. Suppression of sexuality out of contempt or hatred of our "lower nature" is an act of ignorance. The biological fact that only the primates, and especially humans, are perennially ready for sex is a clue to linkage between our animal origins and our higher destiny. But there is a critical period during the kundalini process—lasting possibly as long as a year or two—when celibacy is important. During that time, the fluid essence is needed for remodeling the nervous system and brain. Otherwise the kundalini awakening will be "aborted" through misuse.

Gopi Krishna has broken new ground and—is it proper to say?—sown seed. He has written about it in books and articles, including two published in the *New York Times*. Now the seed-idea must be nurtured by science.

And it is being nurtured. The eminent German physicist C. F. von Weizsacker, director of the Max Planck Institute for the Life Sciences in Starnberg, has become interested enough in the idea of kundalini to contribute a 47-page introduction to *The Biological Basis of Religion and Genius*. The book was published in Harper & Row's prestigious Religious Perspective series, which includes intellectuals and theologians such as Paul Tillich, Erich Fromm, Karl Barth and R. C. Zaehner.

Writes von Weizsacker: "At the center of his entire argument Krishna places an evolution of the organ of consciousness which can be described in physiological terms. Our sciences know nothing whatever of such an evolution. This is the field of contest." He adds that this view of sexuality serving evolution either in reproduction or in the heightening of consciousness is dependent on the esoteric concept of prana. But "prana is not necessarily incompatible with our physics. Prana is spatially extended and vitalizing. Hence above all it is moving potency. The quantum theory designates something not entirely remote from this. . . ."

But physiology is just as important as physics. Here, India has taken the lead in a move that could become the Manhattan Project of the mind.

Late in 1974, at the 26th International Congress of Physiological Sciences in New Delhi, the government of India announced that it is beginning a long-range scientific investigation of kundalini at its All-India Institute of Medical Sciences. Dr. B. K. Anand, president of the congress and an internationally-known consciousness researcher through his studies on yogis, made the announcement. Dr. Karan Singh elaborated on some of the project's implications, and has said that the research "could be of truly global significance".

The kundalini project is part of a larger study of mystics from different religions to find the common element among various religious practices that is ultimately responsible for bestowing higher mental powers. It will be under the overall supervision of Dr. S. K. Manchanda, head of the department of physiology at the institute. Dr. Manchanda noted that India has ready access to practitioners of yoga at various ashrams, and that the ancient science of kundalini yoga was built on the possibility of employing the life force as an instrument for effecting a metamorphosis of the brain and raising it to higher levels of perception. His aim is to see if there is corroboration for what is contained in the ancient literature, such as *Saundarya Lahari* by the sage Shankaracharya. Gopi Krishna, who helped bring the Indian government to action, will act as one of the research subjects and consultants to the project.

In his address to the congress, Dr. Karan Singh observed that man's predominant faculty is the capacity to be conscious of himself and his surroundings. "What is the texture of this consciousness?" he asked the 2300 physiologists assembled from around the world. "What are the links between the genetic structure of man and his capacity for conscious awareness? Can manipulating the one influence the other? What are the functions of those areas of the brain that are still unexplored? Is man, in fact, evolving towards a transmutation of consciousness in much the same way as animal consciousness after millions of years on this planet evolved and developed into human consciousness? Is it possible that man is on the threshold of a new evolution? If so, what will be the concomitant changes required in the human body, particularly the brain?"

These are the questions that relate to everybody on Planet Earth. They challenge the entire scientific community—a community that so far has been unable either to explain man or tame him. As Albert Einstein observed, nuclear energy and the atomic bomb changed everything except man's thinking. And only last year the renowned neurosurgeon Wilder Penfield admitted in his book, *The Mystery of the Mind*, that all his experience in trying to understand mental experience—the mind—on the basis of brain studies had come to nothing. "The mind is peculiar", he wrote. "It has energy. The form of that energy is different" [from the electrochemical energy in the brain's nerve pathways].⁴

Gopi Krishna feels he has the answers to Dr. Singh's questions and can identify the

4. Wilder Penfield, *The Mystery of the Mind* (Princeton: Princeton University Press, 1975).

mysterious mind energy that has eluded Dr. Penfield. Kundalini can do what Einstein wanted: change human thinking. That is because, as Gopi Krishna presents it, kundalini is the first testable field theory of psycho-physical linkages between mind, body and cosmos, covering the entire spectrum of psychological, psychic and spiritual phenomena. With it comes the possibility of objectively studying higher consciousness, thus bridging the gulf between science and religion, and ending metaphysical speculation about matters presently beyond science.

This is a daring stance. Nothing since the Scopes "Monkey Trial" of 1925 so vigorously calls attention to the controversial cause of evolution. Let Gopi Krishna, therefore, have the last word: "The aim of this evolutionary impulse is to make man aware of himself, and with this sublime awareness, to make him regulate his life as a rational human being, free from egotism, violence, excessive greed and ambition and immoderate lust and desire, to lead to a state of unbroken peace and happiness on the earth. . . . Enlightenment, therefore, is a natural process ruled by biological laws as strict in their operation as the laws governing the continuance of the race. . . . This is the purpose for which you and I are here—to realize ourselves . . . to bring the soul to a clear realization of its own divine nature."⁵

5. Gopi Krishna, "The True Aim of Yoga". *Psychic* (February 1973).

ASPIRATION

All things express themselves in hues
Which batter on the gates of sense;
But He to giant peace subdues
The fire of His omnipotence.

A calm soul-light belongs to Him;
My heart with deepmost visioning word
Essays forever but to limn
The secret smile of the Unheard.

I crave a tuneful ecstasy
Lit by a sun beyond earth-skies--
The in-soaring bird of mystery
Whose pinions are entranced eyes.

PASSIONS

Your little passions tire me—I would clasp
A huge magnificent futility
To heart, rather than through brief rapture grasp
A mote of sure success. A whole wide sky,
Impossible with lone God-reverie
No thought has compassed and no will subdued,
Shall hold in agelong pain of ecstasy
My drunk desire. No less, for I have viewed,
Astir within my clay's engulfing sleep,
An alien astonishment of light.
Let me be merged with its unsoundable deep
And mirror in futile farness the full height
Of a heaven barred forever to my distress,
Rather than hoard life's happy littleness.

K. D. Sethna

A member of the Sri Aurobindo Ashram for many years, K. D. Sethna (Amal Kiran) is a poet, author, and editor. His published works include three volumes of poetry—the most recent of which is Altar and Flame (1975)—several books dealing with literary and philosophical topics, and numerous articles. Mr. Sethna has been the editor of Mother India, a monthly review of culture, since its inception in 1949.

DISTRIBUTIVE JUSTICE ON THE INTERNATIONAL LEVEL

Part II: Contemporary International Forms of the Problem of Distributive Justice and Proposed Solutions

Henry Winthrop

3. Existing Literature and Examples Appropriate to an Understanding of Distributive Justice

The basic problem in introducing the general reader or student to the notion of distributive justice and in creating the fullest possible understanding of the variation in its meaning for different contexts is an unfamiliarity with the types of literature that will contribute to the development of the required understanding. The fundamental difficulties are, I believe, the need to recognize that there are four different types of literature with which the reader who seeks an understanding of this concept should become familiar. These are (1) a clear intellectual understanding of the concept of distributive justice and the minor modifications of that concept that have been employed in different contexts; (2) some familiarity with concrete situations that express the "facts of life", that is to say, the kinds of data that reflect national and international inequities--inequities that call for redistributive justice in our time; (3) variables and criteria that will affect a solution to the problem of redistributive justice; and (4) existing or proposed plans for the achievement of redistributive justice on both the national and global scales, as well as the types of data needed for the realization of such plans.

There is, of course, a vast literature dealing with the notion of distributive justice in its quantitative aspects and in the related notions of welfare and utilitarianism. We have already mentioned the volumes by Rescher on distributive justice and on welfare. His volume on distributive justice has a lengthy bibliography on distributive justice and utilitarianism. The same author's volume on welfare likewise provides many references germane to the concept of welfare. The two volumes by Rescher will be comprehensible to the intelligent, serious and conscientious general reader who gives these volumes both time and attention.

There are, of course, very much more difficult volumes for the reader who seeks substantial mastery of some of these concepts. The concept of welfare has been examined extensively and in depth by Rothenberg¹⁴ and Baumol devotes one full chapter and parts

14. Jerome Rothenberg, *The Measurement of Social Welfare* (Englewood Cliffs, New Jersey: Prentice-Hall, 1961), 367 pp.

of several others to this same concept.¹⁵ Finally, let us note that a volume by Rawls, now only a few years old and recognized as a major philosophical work in the twentieth century, has a great deal to say about distributive justice that has proven to be entirely new.¹⁶

I have spoken of the need to acquaint students and readers with situations from contemporary issues that illustrate the importance of distributive justice. What I have called the "facts of life" are important in connection with imparting to students the manner in which tensions that are fundamentally a demand for redistributive justice in a variety of situations impact on their lives. Concrete examples must be furnished to students of current problems in distributive justice. Thus the exploitation, control and ownership of the current resources of the seas, from the surface through the underlying waters to the sea bed, are forcing a real contemporary problem in distributive justice at this time upon the world. All nations need the fish in seawater for their protein content. But, at the present time, Russian fishing technology enables the USSR to capture more fish and process them at sea than would be possible using American fishing technology. As a result, the Russians can exploit more of the ocean's fishing grounds than can other nations, so that the Russian annual catch in pounds of fish per capita is now probably the highest in the world. Should this Russian per capita advantage be tolerated simply because of the superiority of Soviet fishing technology?

A similar situation arises in connection with the mineral resources of the ocean's bottom. The ocean's bottom contains a veritable plethora of mineral resources. The manganese nodules on that bottom contain many metals—manganese, cobalt, zinc, etc. The United States has a new technology, soon to be exploited, for bringing tons of these nodules to a surface ship and towing them to the nearest refinery for processing, in order to meet industrial needs. This advantage would enable the United States to obtain annually more poundage of mineral resources per capita than any other nation. At the same time this will also result in ocean bottom areas being staked out for exploitation by the new technology and—by virtue of squatter sovereignty—being forever made unavailable for exploitation by other nations. Should such deprivations be endured by developed and underdeveloped nations lacking our superior technology in mineral resource recovery?

One answer that has been given for preventing inequities, such as the one that could arise for world fish resources, is to stake out ocean areas near the littoral, and reach agreement, via the law of the seas, declaring such fishery areas a resource base that belongs to the world. This should then be followed by detailed legislation that allows the fisheries pie, so to speak, to be distributed to those nations of the world that face the world's oceans and seas. But immediately problems in distributive justice arise. Are we to decide that nations not on the littoral, that is landlocked nations, are to obtain little or no fish protein, table-grade or otherwise, because of the accident of their geographical location? Or—to put the matter another way—are the people of the landlocked nations to be reduced in the amount

15. William J. Baumol, *Economic Theory and Operations Analysis* (Englewood Cliffs, New Jersey: Prentice-Hall, 1961), 430 pp.

16. John Rawls, *A Theory of Justice* (Cambridge, Massachusetts: Belknap Press of Harvard University Press, 1971), 607 pp.

of fish protein per capita that they receive to a point below the critical nutritional minimum needed per capita?

An even more pressing difficulty arises for the littoral nations themselves. How is the fisheries pie to be distributed among them? By the criterion of their population size? This would reward nations that are indifferent to the world need to control population size. By the coastal length of the littoral of a nation? This would give countries like Australia a return per capita beyond their needs, creating waste, and, at the same time, would give countries like Togo or Dahomey a slice of the fisheries pie that would be insufficient for their population needs. Thus one can see immediately that criteria must be developed to avoid such injustices. The quest for justice in this context constitutes a problem of distributive justice. The quest for one or more solutions to the problem represents an effort to solve one form of the problem of distributive justice.

A similar problem will arise in the near future in connection with the just distribution of the ocean bottom's mineral resources to the nations of the world.

The solution to a problem of distributive justice would reflect an effort to abandon the national egocentricity that is dominant today with respect to the ocean's wealth, where nations seize competitively what they can with whatever technical means they have at hand, unconcerned with the needs of the people in other nations. This national egocentricity was exhibited at the early international conferences devoted to the law of the seas, where the chief concern was which nations should have jurisdiction over what resources. The proper question should be quite a different one in a critical resource period like the present, where the ocean's food resources are dwindling daily, due to such factors as excessive pollution, increasing national populations and fish catches that are currently so great that they will not sustain needed yields in the years ahead. The proper question should be how best to sustain or to manage the ocean's resources on behalf of the nations of the world. To quarrel about which nations should have jurisdiction over which resource or fishing grounds is obviously absurd when the resources and fishing grounds are disappearing before our very eyes.

The variables that will affect redistributive justice are many. Different individuals and groups are today proposing different criteria for solving that form of the problem of distributive justice with which we are concerned here. The chief answer that is being given by official representatives of the nations of the world has been mentioned above. It is to fractionate legal jurisdiction over the wealth of the seas and reach an agreement as to which nations get what and how soon. Other answers are being given in terms of immediate, current, national needs as in the demand that supplies to end hunger and malnutrition be shipped immediately to nations whose people are starving and dying, like the inhabitants of the Sahelian countries of the Sahara. Others want wealth apportioned by current national population size or by current birth rates. Others, like the Paddocks, have advocated applying the medical principle of triage to the nations of the world, dividing them into those that are currently meeting their resource needs, those that are not but can be helped to do so, and those who do not appear willing or able to make an effort to meet

their resource problems at any time in the near future.¹⁷ An analogous use of triage would result in allowing nations in the third group to face extended misery.

Some thinkers are advocating the development of criteria for dealing with the problem of distributive justice by examining the resources which underdeveloped nations can command in order to effect a quid pro quo with the technologically advanced nations that have resources or finished goods that they themselves lack. This is resulting in the rise of many new types of commodity cartels throughout the world. Other thinkers are insisting that redistributive justice should be a function of the degree to which nations are willing to try to develop needed technology, with a little help from the technologically advanced nations of the world. Others, like Schumacher, are advocating the use by disadvantaged nations of labor-intensive rather than capital-intensive machinery, known as Intermediate Technology.¹⁸ Many social scientists are calling for the lowering of the standards of living in affluent countries in order to provide for the needs of disadvantaged ones and are asking for techniques to measure and control such lowering—which need not at all be drastic in affluent countries—by means of social indicators still to be developed.

Some economists, like Barbara Ward, have advocated and continue to advocate that one or two percent of the GNP of the technologically advanced nations should be set aside as credit to be extended to the underdeveloped nations of the world.¹⁹ Many thinkers today are asking the OPEC countries, particularly the oil-rich Arab countries and Iran, to make loans to the poor nations of the Third World and the Fourth World, at very low rates of interest and for very long maturity periods. And, of course, the personnel of such relatively new institutions as the World Bank and the International Monetary Fund have been asked to develop new financial schemes that will not only facilitate redistributive justice through the transfer of purchasing power via novel credit arrangements but which will also facilitate technology transfer and the effective utilization of new technology.

These different recommendations mentioned above are only a handful of the large number of existing proposals that have been made for effectively meeting our current global problems of redistributive justice. The thinking along these lines should be brought to the attention of adult readers and students interested in such areas as international relations, international studies, international affairs, international trade, foreign policy, etc.

Finally, the student should be made acquainted with current plans that are being developed for the achievement of redistributive justice on a global scale as well as data sources for the realization of these plans.

One of the most interesting plans for achieving redistributive justice and a new inter-

17. William and Paul Paddock, *Famine 1975! America's Decision: Who Will Survive?* (Boston: Little, Brown & Company, 1967), 276 pp.

18. E. F. Schumacher, *Small Is Beautiful: Economics As If People Mattered* (New York: Harper & Row, 1973), 290 pp.

19. Barbara Ward, *The Lopsided World* (New York: W. W. Norton & Company, 1968), 126 pp.

national economic order is represented by the work of John and Magda McHale.^{20,21} This work was mentioned in the paragraphs we have already cited, drawn from the paper by Harlan Cleveland. Dr. Cleveland has written an introduction to this volume—an introduction that is appropriately entitled “The Fairness Revolution”. The central task undertaken by the McHales represents the underpinning of all efforts to solve the problem of distributive justice on an international scale. That task is the assessment of human needs within our global context. Specifically it asks the question “Can we meet basic human requirements in terms of resource adequacy and without transgressing the carrying capacity of the biosphere?”

The work of the McHales was done under the auspices of the Aspen Institute for Humanistic Studies (AIHS). One of the primary purposes of the AIHS is to conduct a continuing multinational inquiry into the ethics, justice and politics of the development and distribution of resources to serve human needs. During 1975, the institute’s program in international affairs gave special attention to the institutions and practices that might constitute a just and workable new international economic order. The name given by the institute to this enterprise is “The Planetary Bargain”.

The “framework for thinking about the planetary bargain” proposed by the McHales is clearly in line with several of the six categories involved in the UN resolution that was passed in September 1975 and which, the reader will remember, was concerned with the first bold attempts to solve the problem of redistributive justice in our time on a global scale. The best and briefest way to acquaint the reader with the appositeness of the work of the McHales for an understanding of the planning intended to solve the problems of redistributive justice, and for acquainting the reader with the kind of data that will have to be employed to facilitate planning of this type, is to reproduce the contents page of the McHales’ study at this point.

HUMAN REQUIREMENTS, SUPPLY LEVELS, AND OUTER BOUNDS: A Framework for Thinking about the Planetary Bargain

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20. John McHale and Magda Cordell McHale, **Human Requirements, Supply Levels and Outer Bounds: A Framework for Thinking about the Planetary Bargain** (Aspen, Colorado: The Aspen Institute for Humanistic Studies, 1975), 91 pp. With an introduction by Harlan Cleveland. A policy paper, Aspen Institute for Humanistic Studies Program in International Affairs.

21. Report of an international workshop convened in Aspen, Colorado, July 7 to August 1, 1975. **The Planetary Bargain: Proposals for a New International Economic Order to Meet Human Needs.** (Aspen, Colorado: The Aspen Institute for Humanistic Studies, 1975), 36 pp. A policy paper, Aspen Institute for Humanistic Studies Program in International Affairs.

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The reader can, I expect, see roughly that it is precisely data of this sort that will be required by the United Nations if its resolution of September 1975 is to be implemented.

Actual plans and proposals for meeting what the McHales have called "the planetary bargain" were outlined in a separate policy paper produced by the AIHS. It is a report of an international workshop convened in Aspen, Colorado, July 7 to August 1, 1975. This policy paper has been explicitly related to the UN resolution of September 1975. Here again the most appropriate way to provide the reader with a rough notion of the nature of the planetary bargain is to reproduce the contents page of this report.

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This content, then, should provide the reader with some notion of the lines along which the participants in the international workshop of the AIHS hope to restructure the new international economic order and solve the now pressing global problems of redistributive justice.

There are, of course, other data sources which should be brought to the attention of readers. And the organizers of the international workshop fortunately assembled some of the most important of these sources in a special bibliography that was made available to the participants in the international workshop. That bibliography was printed in *The Planetary Bargain* with the accompanying descriptive paragraph which follows:

There is of course an enormous literature covering economic and social development, world needs and resources, international arrangements and institutions. For the benefit of the participants in the Aspen International Workshop, we assembled a number of papers and pamphlets which we thought might be especially useful to "practical non-specialists" trying to gain some integrated understanding of the whole range of sub-

jects involved: food, population, energy, raw materials, development, environment, oceans, trade, investment, money, basic human needs, and decision-making systems at the international level. This small "library" was available throughout the Workshop.

The material assembled in this three-page bibliography has been classified within the following eleven categories: food, population, energy, non-fuel resources, investment, money, oceans, environment/weather, trade, general, and basic planetary bargain documents. The reader who assembles the library implicitly recommended by this bibliography will obtain a real grasp of contemporary data relevant to the new international economic order envisaged by the UN resolution of September 1975. He will also find within his grasp the kind of data most relevant to the understanding of the problem of distributive justice and clearly relevant to plans and proposals for the solution of the problem of redistributive justice on a global scale.

I have tried in this paper to show the relevancy of the problem of distributive justice to the following matters: (1) the task of meeting the just needs of all peoples everywhere; (2) the redressing of presently existing material and economic imbalances on a global scale—imbalances that have been created by the haphazard industrial and technological activities of the affluent nations; and (3) the construction of a now needed new international economic order. An understanding of our twentieth-century forms of the problem of distributive justice, in relation to our international and global needs, is of moment not only to students in higher education but is also of major importance to the general reader. If this paper arouses the reader to extend his familiarity with these problems, our efforts will not have been in vain.

THE ROYAL PYJAMA'D HORSE — II

Maggi Lidchi

When the time came to part from Mukund something in Chandrakant was sad. It was the first and only time that he felt something tug to keep him here and he was suddenly filled by a strange urge to practise bending the knee, practise it before Mukund so that he would know how, on the unlikely chance that it would be necessary when he got to India and met his tiger. But it was Mukund who had always bowed to him and sometimes it is awkward to do things in a new way all of a sudden, specially on a last day when everything is rather bewildering anyway, and so he just stood there quite unable to get rid of the full pain in his chest. And in the end, since he could neither bend his head nor his knee nor quite get rid of the urge to do so, he just tossed his head and shouted, "I have to go; the Royal Bengal Tiger is waiting for me", and galloped away.

When he looked over his shoulder once, he saw that old Mukund was kneeling in the dust and had his great forehead to the ground and so he galloped back but still didn't know what to do so he just stood there awkwardly for a while and then galloped away again.

He went to the horses and told them where he was going and what he was going to do. They didn't of course understand but they made friendly jokes in their rough way and some of the old mares licked his face and laid their necks along his for a while and one of the old horses gave him a friendly kick in the py-

jamias and he was galloping off again. He wasn't going to say goodbye to mad Billy, because he wanted his coat in good condition for the voyage, and there was nobody else he really wanted to see, but as he got to the river he found the one being he didn't want to see waiting for him, Pomegranate the Parrot. The very sight of her was painfully embarrassing to Chandrakant. For one thing she looked weirder and more eccentric than ever with her tail feather missing and he was less than delighted by the reminder of where his royal emblem came from. He pretended not to see her, but nuisance-bird that she was she hopped down to a lower branch and accosted him.

"Chandrakant."

"Chandrakant", he mimicked her.

"Chandrakant you are going away."

"Yes I'm going away and that's just why I have no time to stop here and talk to you." It was no use trying to explain to her in detail what he was going to do. This parrot was hardly likely to understand the demands which life imposes on royalty.

"You are going away and I shall miss you."

For a moment he did not know what to say. She was the first animal to admit this sentiment though Chandrakant well knew that the others all secretly felt the same way. It disturbed him a little. What did it mean? Perhaps it was just that nobody else would talk to her. Perhaps she didn't like the idea of him



going off with her tail feather and was about to ask for it back. What else could it mean? He mustn't waste time on mysteries and riddles.

"Chandrakant, you are going away to become a great leader."

"Yes." It was not the first time she had surprised him with the profundity of her wisdom.

"I will come with you and be your faithful follower." Chandrakant had a nightmare vision of himself travelling through the world with this bizarre old bird fluttering around him or perching on his shoulder and croaking into his ear. He would be the laughing stock of the animal kingdom; nobody would take him seriously. Oh! most certainly not. She could not come with him.

"That is quite out of the question, Pomegranate. You do not know all the difficult things that I have to do. You would only be in the way. Besides which, I have to swim across the sea and you do not know how to swim."

"I could fly over if you would lend me my tail feather. I would give it back to you as soon as we get across."

"Most certainly not. That is quite out of the question."

"But think, Chandrakant. When you have to pay me the first kindness it would be much more convenient if I were with you; otherwise you will have to come all the way back."

"Don't worry about that. By then I shall be used to travelling and swimming and it will be no inconvenience at all."

"All right Chandrakant. But don't forget." She fluttered her wings and turned around once to say again, "I shall miss you." And then she was gone.

The moment she was gone a strange thing happened to Chandrakant: for the first time

he felt that he was leaving home. And though he certainly couldn't have the uncouth old bird fussing around him, he found himself hoping that there would be parrots in India. Then he suddenly remembered—in a way he would have preferred not to—that it was Pomegranate who had been the first to tell him about his destiny and also that she had, after all, given him her tail feather. Not only that but she had put it on his brow for him. And she had wanted him to say something kind to her and he hadn't been able to. A faintly oppressive feeling came over him, like a hand pushing at his chest as though trying to squeeze out something kind. Yes he actually wanted to say something kind. But there was no time, there was no time for anything. Besides, he didn't really want to see Pomegranate again and he knew if she were suddenly there before him he would probably say something rude, so he just sighed "Poor Pomegranate", not knowing what he meant and then, taking a last look at himself in the river, he jumped in and started swimming across.

The last days or moments before you leave a place in which you have lived for almost all your life, or at least for all the life you are able to remember, can be confusing and all sorts of strange feelings may arise; but once you are on your way actually travelling and doing something things get better. Now that he was swimming he thought of nothing but his high destiny.

Suddenly as he was swimming a strong current sucked Chandrakant under and he found himself amidst a school of fish. To his delight he saw that they were all wearing pyjamas.

"What sort of fish are you?" he asked.

"Zebra fish" answered their spokesman, a big luminous looking fish who swam right up to his face and goggled at him. "And you?"

"I'm a Royal Pyjama'd Horse."

He wondered how the zebra fish, lacking knees to bend, would make obeisance, but the fish merely swam around him and finally said, "Got any bread crumbs?"

"Bread crumbs? Listen, I'm on my way to India to get the Royal Bengal Tiger to bend . . . I mean to be recognised by the Royal Bengal Tiger, then I'll come back for you, you can be my Royal Naval Guard. How's that?" The zebra fish goggled at him some more and then swum right around him again. Then he went back to say something to the waiting fish. Suddenly bubbles came out from all the zebra fishes' mouths.

"Don't forget," said Chandrakant, "I'll be back soon. My name's Chandrakant, His Royal Highness Prince Chandrakant." Then he had to go up for air. He finished swimming the river, not without difficulty for he was repeatedly being sucked under. And whenever he met a crowd of fish he had to enlist them in his Royal Naval Guard which was, he explained, waiting to serve him when he came back. All this took time and energy and he arrived on the other side quite exhausted. He lay on the bank panting and his teeth chattered with cold. And now as he lay in the sun waiting for it to warm him he wished somebody would come and tell him the way to India. There was land for as far as he could see, flat as a stone and very desolate, and it made him feel desolate just to look at it. Suddenly he wished he weren't alone. He wished Mukund were here beside him with his knowledge of the world and his wise advice. He wished anybody were here from home; even Mad Billy. There was a flutter of wings.

"Hullo Chandrakant." It was Pomegranate the Parrot.

"Hullo Pommy", he said taken entirely by

surprise. He was pleased for a moment . . . before he had a chance to think, that is, and before Pomegranate flopped down beside him. She was a sight and her breath was rasping. There was a distinctly wild look in her eyes as she stared at him trying to get her breath back, her wings fluttering spasmodically.

"Wanted . . . just wanted . . . thought you'd be glad."

"Just get your breath back first Pomegranate", he said in irritation. Her head feathers were askew from battling the wind and it had taken Chandrakant no time at all to realise that he didn't want anybody from home after all. He'd be better off doing this whole thing by himself. What if his Royal Naval Guard had seen Pomegranate and taken her for part of his Air Force? They would have giggled and swum away.

"Listen Chandrakant," she said at last "I have something important to tell you. This is a wide continent, difficult to cross and you are likely to meet a lot of wild animals. And on the other side is the sea."

"I know I'm going to meet a lot of animals. What do you think I've come for. And as for the sea, don't worry. I'll be quite all right. I've already recruited a naval guard. Now you just go home and get some rest and for heaven's sake preen your feathers a little. You look a sight."

"You look a sight", said Pomegranate but it was only her nervous habit of repetition. "I can't Chandrakant. I'd fall into the river and drown. I must get my breath first." Not that he minded so much at the moment what happened to Pomegranate. He was exhausted himself and if it was such a wide continent he would soon lose her anyway.

"You are going home though, afterwards, aren't you Pomegranate? I mean I don't want

you to worry about me."

"Worry about me. Oh yes, I'm going home. I haven't the courage to cross continents. I just wanted to see you on your way."

"Yes. Well, I'll be all right."

"All right. You don't want me to get an aerial guard together for you do you Chandrakant?"

"For heaven's sake Pomegranate don't be so . . . " he couldn't think of the word, "so friendly." It was driving him mad. He had so much to think of without having to worry about a lunatic bird wheeling over his head with goodness knows what motley assortment of feathered has-beens she might round up. He managed to get to his feet and prepared to canter away. He certainly couldn't manage a gallop now.

"So friendly. Stop one moment. Chandrakant I have one last thing I have to tell you. You must know. You're a zebra. I knew an African parrot once from Mozambique who told me . . . "

"Listen Pomegranate. I know exactly what I am. I'm a Royal Pyjama'd Horse. All you've seen are those wild primitive horses and so you don't realise. Go and ask Mukund; and I'm going to find the Royal Bengal Tiger."

"Royal Bengal Tiger."

"Yes Royal Bengal Tiger, you addeleated old fool" he added.

"Royal Bengal Tiger? That's very dangerous Chandrakant. That's just about the most dangerous thing in the world."

"I'm a Royal Pyjama'd Horse and he's a Royal Bengal Tiger so he won't be dangerous for me because we have something in common. Besides which I know what to do. Most animals don't", he said pointedly.

"Most animals don't. All the same Chandrakant you should remember you're just a little zebra and you must be very careful."

This cracked old fowl was getting him mixed up with the zebra fish or something just because of the pyjamas. He didn't know whether to laugh or be angry but it was patent that he must have nothing more to do with Pomegranate, not even on this deserted shore, because if he encouraged her she might . . . He had an awful picture of her turning up at all the crucial and solemn moments of his life with her tail feather missing so everybody would see where his royal brow emblem came from and introducing herself as a dear friend from his childhood. Actually it wouldn't be bad if she dropped down with fatigue on her way back over the river; and while he didn't actually hope that she'd drown he did wish that a strong current would pull her down to the bottom and that she'd never come up and bother him again.

"You look rested now Pomegranate", he said. "Why don't you go home? You'll get your second wind as you go along you know. One does. And in case you get tired there you may call on my Royal Naval Guard for assistance. Now *they* are zebras, Pomegranate. You know I'm sorry to say this because I know you mean well, but if you just lump royal horses and zebra fish in the same family you have to be very ignorant."

"Ignorant! I just wanted to see you on your way." Pomegranate began preening. Then she stopped. "It's no use, I can't do anything with my feathers in this wind." And she turned her head this way and that but Chandrakant couldn't stand it any more and suddenly he had the strength to gallop, not to canter, but to gallop away . . . away from, Pomegranate.

And there he was with a whole continent to gallop across, and once he got his second wind it was very exhilarating. Except that when he looked back and saw how flat the

land looked and how far he was from the river he once again wished he'd been a little nicer to Pomegranate—from which you may gather that he was inconsistent. He even hoped that the poor old bird wouldn't fall into the river, on the condition that somebody enlightened her about his identity. He wished he'd sent her to Mukund before leaving home. Ah well, it was too late now. He must turn his thoughts to the future and not to the past.

And just at that moment the future came lumbering into his present in the form of a giant porcupine, all his many needles on end.

"Hullo," thought Chandrakant, "can this animal be of any use in my following?" And by now you must have realised that this was the way Chandrakant was going to think when he came across a new animal. Chandrakant skidded to a stop.

"What is your name", he said tossing his head so that the red feather waved in the air. He spoke with such confidence that not for a moment did the porcupine think of not replying politely

"Paul Porcupine." Not that Chandrakant was much interested in the creature's name or most other things about him for that matter, but one had to be generous, and there was always the possibility that through sufficient contact with striped animals so crude a creature as this might improve. He came right to the point.

"Paul," he said, "I am going to subjugate the world. Would you and your family like to help me? You people could be the spearhead of my army. I think if there were any volunteers porcupines would make very good cannon balls. What do you say?" Paul looked doubtful, so Chandrakant said, "If there are no volunteers it doesn't matter; we'll find another way."

Silence.

"You look a capable young fellow, Paul. I'll leave it to you to organise things. I'll be back this way for I have to review my Royal Naval Guard and also I have to go and subjugate a lot of wild ignorant horses on the other side of the channel one day, so as I said I'll leave it all to you."

Chandrakant galloped off feeling very pleased with himself, for if you remember he had started off with the idea of gathering only pyjama'd animals around him but a true general is never entirely bound by a preconceived plan and Chandrakant was beginning to see that he had more than just flair for his mission. He had genius. He now saw that there was no reason not to enlist any and all in his following. Indeed, he now realised, with a sense of awe at the responsibility fate had laid upon him, he could do no less: all must at least be given the chance to develop themselves through service to him. He could feel the wind blowing his feather back and it seemed to be whispering in his ear, "Chandrakant you are the greatest in the whole world." The wind murmured it, the birds sang it, the insects hummed it.

"Chandrakant. Chandrakantbaba. You are the greatest. Chandrakant. Chandrakant. Chandrakantbaba. You are the best." And he galloped faster and faster until all he could hear was "Chandrakant. Chandrakant. Chandrakant. Chandrakantchandrakantchandrakant." The whole world was saying it.

Then suddenly a blur moved into sight and he heard the sound of hooves. It certainly couldn't be the cloud-footed tiger for it sounded like the wild horses at home only heavier. He swung his head to get the wind tears out of his eyes and skidded to a stop. He was frothing at the mouth. A lumpy looking animal stood before him.

"For you too there is a place in my follow-

ing." The animal stared and chewed at something without answering. Chandrakant, even before he had properly caught his breath, began outlining his plans to subjugate the world. And though he gave only a sketch of what he intended to do, it took some time, because he spoke of Mukund and what he had told him, of the naval detachment he had left behind, of the air force which a colourful and dashing air commander was even now organising on the other side of the channel, of his future meeting with the Royal Bengal Tiger in India in which the greatest and most powerful and most dangerous animal in the world was to bend the knee to him. The animal considered this for a long time while Chandrakant surveyed him with his bloodshot eyes. It looked as though the animal might never answer but at last he did.

"Why?"

It is a very sad thing for great personalities, but more often than not and specially at the beginning of their careers before they have proved themselves they simply are not understood. Beside this animal, Paul Porcupine, who had seemed rather slow to Chandrakant, now appeared the very essence of animal intelligence. There was, Chandrakant perceived, an extraordinary dullness, perhaps congenital, about the creature, but since he had asked the question Chandrakant thought it best to explain, for the creature looked strong as well as lumpy.

The Royal Bengal Tiger was the most beautiful, noble and terrible animal in the world and once he, Chandrakant, had been recognised, complete subjugation of the world, his predestined fate, would follow swiftly.

The lumpy animal chewed for a while. "Why?" he asked lumpily.

"What's your name?" asked Chandrakant

narrowing his eyes. The lumpy animal finally sighed.

"I'm called the Lumpy Animal." Chandrakant made a note of this.

"The Lumpy Animal eh? All right," he said, "well what do you say?"

"No."

"Why?"

"Not interested."

Chandrakant was stunned. He shook his head. No thoughts came. No words came. At last he said, "You're not, eh? Well I'll be passing this way again and we'll see about that." Chandrakant galloped away but not so fast as before. The wind no longer sang his name so clearly. He still heard "Chandrakant, Chandrakant, Chandrakant" but there was a question in it. "Chandrakant?" And he had a lump in his chest as though he had swallowed the animal.

But the next time he stopped was an entirely different matter. And this time it was not he who called the meeting. An animal stood in his path and holding up a paw said, "Whoa there, what's the hurry?"

Chandrakant came to a stop again but this time he was wary. Instead of explaining his plans he said, "What do you want? Who are you?"

"I'm Ferdivelli" said the fox. "And I can see you're bound on an important mission which is of extraordinary moment to the world." Chandrakant's heart stirred as he thought, *what* a clever animal. How intelligent his long sensitive face. How unlike the Lumpy Animal. And this meeting dissolved much of the lump left from the preceding one.

Being recognised was so sweet to him that suddenly there arose in Chandrakant a great desire to say something very kind to the fox. There was a struggle in his breast where this feeling arose, for no escape route for such utterances had ever been opened in him; and

so it turned around and around like something caught in a trap. But then something tore free and opened a channel to his brain. The process, though swift, was very painful and he began to stutter and choke.

"Dear f-f-f-fox, dear dear Ferdivelli . . . " and now he felt he was going to say something important, something shattering. The fox waited smiling politely. Suddenly there was a flutter of wings. Chandrakant shuddered. He knew without looking up: Pomegranate come to claim the kindness. The part of the lump that the Lumpy Animal had left in him swelled to an enormous size and he knew the bitterness of not being understood, of being hindered by the selfishness of those who would stand in his way. Without looking at her he said, "What do you want?"

"Want? I thought I'd save you the trouble of coming back Chandrakant. You have had such a difficult journey and I thought you might be tired so I thought that if you wanted to utter the kindness now it would be easier for you. But only if you are so moved of course. Otherwise it doesn't count."

"Well as it happens I'm not so moved at all Pomegranate, I've never been less so moved in all my life", and indeed the desire to say something specially nice to the fox had suddenly evaporated. All that he felt was a hopeless lump in his breast and a desire to kick Pomegranate.

"Now let me see," said the fox blinking sympathetically "what seems to be the trouble? I hate to see two old friends . . . " Chandrakant groaned "falling out."

"It's not like that, at all", said Chandrakant. "It's just that a long time ago I very foolishly agreed . . . "

"No, no. Don't tell me", said the fox sniffing the air lightly. "Let Ferdivelli guess, intuit, put his flair to work." And he looked at

the feather on Chandrakant's brow and he looked at the place where Pomegranate's feather should have been or had been—the lump of hopelessness in Chandrakant's heart turned into a lump of despair.

"You owe the lady" and here the fox turned with a slight bow to Pomegranate "a favour. You have been very fortunate. The lady" and Pomegranate began to preen and to turn her dishevelled head this way and that "has favoured you with her tail feather and for this you agreed to reward her in some way at a future date. Is that not so Your Highness?" These last words that should have been balm to Chandrakant were turned to gall and wormwood by the bird's presence.

"I suppose so", he said, pawing the ground and tossing his head impatiently.

"Don't do that Chandrakant dear you look just like one of the wild horses." This little intimacy at this particular moment sent a fierce current through his head. To think he had saved her from drowning. He had been foolish and magnanimous; all such weakness must be rooted out of his breast. The quickest way would be to tear the wretched feather from his head.

"Take it" he screamed.

But now I have to relate a strange thing. The feather was rooted and though they all tried to dislodge it, it simply could not leave his brow.

"It is the way of these things Prince Chandrakant", sighed the fox. "If you have struck a true contract, the feather cannot be redeemed until you have paid."

Chandrakant wept.

"Now come, come, this is no cause for despair" said Ferdivelli. "What was it that you promised in exchange for this . . . er . . . emblem of royalty?"

Chandrakant would not answer so the fox

turned to Pomegranate.

"He promised that the first three kind things he uttered would be for me."

"Oh dear. Oh dear. Oh dear", said the fox. "This thirst for kindness. Well my dear as you can see he is in no condition, nor do I believe that for some time he will be unless . . . Prince Chandrakant do you think that you could find it in your heart . . . "

"I suppose we'd better get it over with" said Chandrakant without getting up. He started shouting, "Pomegranate, I . . . " (arched in the opposite direction so that he wouldn't have to see her gratified face). But he immediately choked, and the words, "This must be love", shot out of his nose instead of his mouth. Then they all tried to pull the feather out again but it was stuck fast.

The fox was the first to give in.

"It's no good Chandrakant", he said. "Obviously the kind thing required must come from the heart. It should have been specified. It seems to have been one of those mad bargains. I see that you're in a tight spot. But what I suggest is this. You've obviously got to give this or . . . what now turns out to be a slight embarrassment," he turned to Pomegranate with a little nod, "though it is most certainly a very fine feather . . . you've got to give it back before you can think of going on with your great mission or enlisting further help. What I suggest is this: remain with Pomegranate so that as soon as, at the very first stirring of kindness in your heart, you can turn to Pomegranate and lavish it all on her. I mean you never know when you'll feel that inexplicable, ah, so unpredictable emotion they call loving kindness, and you see you can't afford to waste it. Pomegranate has to be there with you night and day. Once you have redeemed your pledge you can go on with your great plan. Nothing can stop you."

Chandrakant groaned.

"Don't be discouraged Chandrakant. You made a bad beginning. But you were very young. You had no counsel. You have your whole life before you. Get this thing done and you will have learnt your lesson, a very valuable lesson. It will never happen again. And if you ever manage to free yourself I shall be waiting to give you sage counsel Chandrakant." Chandrakant noted that his title had been dropped. But then who could believe in him with that crazy parrot fluttering about as if they belonged to some vaudeville act.

"Pomegranate," he said "why don't you go home. I'll call for you when the moment comes."

"Oh most unwise", said the fox jumping up. "The feeling you know . . . that special feeling, may arise at any moment and then the Lady may not be able to reach you in time. It would be a great shame to waste it. So my advice is, persevere. You have come to this pass because of one unfortunate decision but the situation is not irreversible. Consider what is at stake. Your whole future. You have suffered much already. Do not let yourself in for further suffering."

What could Chandrakant do? He knew the fox was right. He must now cross the continent saddled with a lunatic bird because of his improvidence. But it would be folly to compound his mistake.

"Thank you for your advice Ferdivelli. I see you are an animal of great wisdom and I shall heed your counsel. Now I shall be on my way. Please tell that . . . bird to follow me. I cannot just at the present moment bring myself to speak to her. If ever I am able to redeem my pledge I shall come to . . . " his voice broke.

"Quick Chandrakant," said the fox urgently

"I detect a note of . . . turn to the lady."

But it was no good. The moment Chandrakant thought of Pomegranate his voice became resentful and he continued to Ferdinelli, "At the moment I see my future shattered at my feet, crumbled into dust. If I can ever get rid of this . . ."

"Tut, tut" said the fox. "Name-calling

won't help you know."

"This bird", said Chandrakant making a supreme effort; "I shall come back and we can carry on where we left off."

"When that day comes I shall be ready."

The fox bowed to each of them in turn, and they were off.

[To be continued]

CHROMOPATHIC ART

Willard Van De Bogart

It has been known for centuries that color has a healing effect on human emotions and disease. Positive curative results can be obtained if the proper use of color is employed in a very judicious way. The converse is also true that harmful effects can occur if there is improper utilisation. Light and color work according to the law of attraction which in turn arouses the sympathetic vibrations within the human body. All radiations emitted from a luminous body travel through space in perfect rhythmic vibrations in the form of waves; the color red is known to have a long wave length and that of violet a short one. When light and color strike a surface, the homogeneous particles are thus thrown into sympathetic vibration with the incoming current. The essence of color healing consists

in causing certain molecular reactions in the organism or vital centers through the medium of the rays. It is possible to make adjustments according to the need through suitable selection of color. Color in itself has three main effects on the human body:

1. Restful: green
2. Revitalizing: red and green
3. Inspiring: blue

In addition to these effects, there are also three aspects of life that color can be associated with:

1. Physical: red
2. Mental: yellow
3. Spiritual: blue

When these two areas are combined or synthesized we have a mixing of colors to then produce this guide:

	Physical	Mental	Spiritual
Restful	green	indigo green	moonlight blue
Revitalizing	orange	royal blue emerald green	gold rose pink
Inspiring	vermillion scarlet	yellow violet	amethyst purple violet

An American artist and musician, Willard Van De Bogart is involved in research into the properties and affects of light and sound. He is a composer and performer with the Electric Symphony, and an instructor in the field of communication/art media. Exhibitions or performances of his work have taken place in various American and French galleries or festivals. Mr. Van De Bogart's articles have appeared in several art publications, and his paper on "Harmonic Neurons" was published in the January 1976 issue of this journal.

In the book *Colour Meditations* by S. G. J. Ousely there is mention that in ancient Egypt the manuscripts written by the Temple Beautiful Priests were done in color. From this insightful book we also learn that it was the third logos that manifested the divine mind, and with this mind there came seven rays or seven spirits of light. Each ray in turn has a subordinate ray controlling the seven major rays, more commonly referred to as the vibratory intelligences or spirits. The red ray became the life ray which vitalized all living matter with its magnetic vibration and thus became the first ray of manifested being.

At the other end of the spectrum there is the violet ray or group which includes amethyst, the purest vibration of the violet ray. Amethyst is the ray of spiritual mastery. It influences the highest centers in man, particularly the crown chakra or the pituitary gland. Violet light is very good for meditation and concentration of the spiritual nature of man. The seven rays of life and evolution can be described as representing the following areas:

1. Red: life
2. Orange: energy
3. Yellow: intellect
4. Green: harmony/sympathy
5. Blue: religious inspiration
6. Indigo: intuition
7. Violet: spirituality

The manifestation of these rays can, then, be considered the evolution of the universe

In his book *The Robe of Many Colors*, R. P. Beesley, principle of the College of Psycho-Therapeutics in England, relates colors to the various auras of man:

- Red: emotional
- Yellow: mental
- Green: astral
- Blue: spiritual
- Violet: etheric body

Beesley's work leads to the location of the color chakras:

1. Red: situated at the base of the spine
2. Orange: in the region of the spleen
3. Yellow: solar plexus and lower mind
4. Green: region of the heart/higher mind
5. Blue: the throat center (gateway of spiritual aspects)
6. Indigo: pineal gland
7. Violet: pituitary gland (super-rational, transcendental)

With color healing there are two main techniques to follow. One is the general diffusion technique and the other is the concentration technique.

Before the concentration technique can begin it is necessary to approach generally the major trunk or torso of the body. It is first necessary to have the person lying flat on a table with minimal clothing on; it is preferable of course if the person does not have any clothes on at all so that the vibratory effects of the light can bathe the entire body. It is suggested that deep breathing exercises be done before the healing techniques begin. At this point the breathing technique is very important. "Color breathing" will give a most refreshing and rejuvenating experience if practiced over a long period of time, and it is suggested that it be continued well after the "color baths". Simply put, color breathing takes place by concentrating on a particular color mentally in conjunction with breathing. It is important that a clear image of the color selected is maintained so that the breathing exercise will take full advantage of the mental image of the color. The color that is selected for the meditation is quite important. It should be noted that hues and tonal changes are very significant in this color-breathing exercise. When the color is well imagined it

is necessary to expell or exhale all the air that is in the lungs. When the air is expelled, concentrate on the color that is particularly associated with the area of the body that is being treated. After the lungs are emptied, breathe in slowly all the air you can and hold to a count of twelve, then concentrate on the color going through the entire body. After counting, exhale all the air slowly. It is suggested that this technique can be profitably done every day early in the morning upon awakening and just before retiring. For the color baths it is only necessary to do this a few times to prepare the body for the external stimulus of color that will then resonate with the color fields that have been invoked through the breathing exercise.

The next procedure is to shine the selected light on the soles of the feet so that the entire bottom of the foot is covered. This technique prepares all the meridians of the body so that the adjustment to the particular color vibration is not abrupt. After the soles have been fully covered, then start moving the color around the ankles and then over the calves and then the knees and finally the upper part of the legs. This procedure will take about five to ten minutes. The person is now prepared for the color bath. The color is then shone on the torso or that area that is in need of rejuvenation. In general it is best to select the exact color for the area that one wishes to rejuvenate. However, another technique that is very beneficial is to balance the entire body with light that represents the complete color spectrum, or the spectrum that was mentioned earlier. When the body is balanced with the spectrum of colors it is then possible to be more exact with the appropriate color for the part of the body that is in need of therapy.

Colors can be far more powerful than

medicine, for color baths can draw blood to the skin and relieve the liver, spleen, lungs, stomach, intestines and the spinal chord. All vital organs have direct connections with the skin through the arteries, blood vessels, capillaries and those tubular transmitters of etheric energy. Application of light rays on one spot of the body can effect the entire blood stream through circulation. Lights heal by stimulation of the oxidation of the toxins, creating vitalization which in turn allows healing. Color then becomes a form of nourishment with the following vitamin/color association:

A: yellow

B₁₂: red

C: lemon

D: violet

E: scarlet

K: indigo

It is now possible to see how color is a very cohesive power in the attainment of perfect health. Each chakra of the body is sustained by vibrational energy which is attuned to a specific color. Violet has a great power to elevate the mind and to quicken the attributes of the soul because its rays play predominately upon the intuitive centers which are located at the crown of the head. Violet then becomes the arch-ray of healing. This apex color of violet is therefore the apex of color consciousness. Violet has been referred to as the healing ray or the ray of intuition or the ray of arch idealism. The violet ray implants phosphorus into the human system as a vitalizing agent, particularly for the brain cells, and it is noted for the removal of cancerous growth. The symbology of violet can be thus interpreted:

Deep royal purple: arrogance

Bluish violet: devotion to a noble ideal

Grayish violet: superstition

Mauve violet: inspiration

Lavender: intuition

It can then be understood that if you "breathe in" light of a color according to your specific need and visualize the color at work inwardly and then visualize the results outwardly there will be tangible effectivity.

In his book *Color Therapy*, Faber Birren claims that color can be used as a language. The brightness and vividness of color will tend to arouse the autonomic functions of the body very similarly to musical vibrations, which can produce changes in cardiac and respiratory activity. It is known that the vibratory effects of music can effect a persons nervous system.

Edwin S. Babbitt, in his work *The Healing Power of Color*, has produced the most comprehensive theory of color. The general healing techniques of Babbitt can be most useful even though they are not endorsed by the American Medical Association or conventional medical practitioners in general. It is interesting to note that even with all the convincing work that has been done with color therapy, no color-healing devices can be purchased in the United States. This state of affairs is in blatant ignorance of the fine research that has been conducted with tangible results throughout the world.

The late Dinshah P. Ghadigli, a medical practioner in India, did more extensive work in color therapy than anyone else. Ghadigli referred to color therapy as "spectro-chrome therapy". In his studies he was able to discover the color that was suited to specific organs. The relations he proposed are:

Red: liver

Orange: thyroid and mammary

Yellow: choroid

Lemon: pancreas and thymus

Green: pituitary

Blue: pineal

Indigo: parathyroid

Violet: spleen

Magenta: prostate

Scarlet: testicles and ovaries

Yellow-orange: vocal chords

With the advent of tuneable dye lasers it is possible to orient the laser on the acupuncture points of the human body to obtain the flow of the color vibrational field into the auric field of the human. The development of the Kirlian techniques enables color healing to have a very accurate read-out to determine just exactly where there is a "leak" in the auric field. By pinpointing the dye laser tuned to the proper color, one can effect a healing influence instantaneously. It has been my experience with the tunable dye laser from Coherent Radiation, a laboratory in California, that it is possible to tune lasers to specific frequencies on the color spectrum and simultaneously to send an audio signal from an electronic synthesizer to resonate the frequency of the afflicted organ. This art or field of study is closely related to the study of radionics, pioneered by the late Dr. Georges Lakhovsky of the Soviet Union. Lakhovsky's son, who is now living in Paris, is continuing the work of his father but is also as a chemist working with the vibrational effects of odors. In the new work with perfumes, the young Lakhovsky has found that lavender is good to have in the olfactory system when sounds are being played; this correlates very well with the previous observation that lavender is conducive to intuitional states which can also be attained by the proper sound. It can now be sensed that the research into esoteric light, color, sound, and olfactory systems are being synthesized; this may be one indication that the new transformative civilization mentioned by the late Dr. Oliver L. Reiser in *Cosmic Humanism and*

***World Unity* is about to emerge.**

The variety of research in color therapy is vast and the findings are related to one another to a great extent, though there are those who feel that they can heal with the use of only a few colors. J. Dodson Hessey of England, for example, claims he can influence all the aspects of man effectively with the three main colors of blue, green, and orange along with the five secondary colors of yellow, rose, amethyst, red, and violet. In his book *Renaissance through the Rainbow*, Roland Hunt makes this comment:

Man is a creature of light born on a wave of color or more correctly three waves of color, for without the three waves there could be no form. One is the vibration of inspiration, the second is his vibration of activity, and the third his vibration of rest or recuperation. Concentrated in his three rays we see all there is to see in this universe . . . basically.

The age we are living in has been referred

to as the Aquarian Age and there is an appropriate color associated with it. We are now being influenced cosmically by the indigo ray. A brief illustration of cultural ages and their colors follows:

Egypt: vermillion

Greece: orange

Europe (11th and 12th centuries): yellow

Asia: middle green

From this short description of color and its relationships it is possible to see the many and varied ways in which color plays an important part in our existence. Our brains emit the vibrations of every thought we think as a color radiation, which accounts for our auras. The brain is not an instrument of thought, but thought passes through our bodies in various colored streams to express itself in various tones through the different centers of the body. Our bodies emit color radiations which indicate our health. It can, thus, be seen that color is a fundamental expression of all life which can be consciously utilized.

CURRENTS OF EVENTS

Ronald Jorgensen

DISCLOSURES OF PROSPERITY

Sweden

Little attention is given to Sweden's economy compared to the prodigious ones of the United States, West Germany, and Japan, but Sweden is a country sustaining the richest people in the world. Richest people, that is, not seen in the per capita sense of averaging out the gross national product across paper heads of the citizenry when, in most countries, wealth is densely crystallized around the conveniences of a miniscule group. But rather in the sense that, according to a *Christian Science Monitor* news release carried in the *Hindu* of January 27, 1976, everyone in Sweden is well-fed and housed, and lives an ample material existence where employment, education, medical care, month-long vacations, and a long series of social services are abundantly prosaic realities in the mass.

One could easily entertain the thought that this war-free and virtually strike-free country has been favored by history since 1816 in order to offer us an example of the conditions much of humanity has been bent on achieving so long: democracy and equality, socialism and widespread prosperity, acculturation, domestic peace and peaceful relations with other nations, and an extraordinary amount of leisure time.

With the present world situation loaded in concentration on those things it would be easy to exclude the subtle periphery of this engrossing bulls-eye in anticipation of having "arrived", were it not for something else the Swedish people have to teach us. The article notes the most common complaint heard is one of loneliness in the midst of what is perceived as an overplanned and organized, overcentralized bureaucracy—a country where, as an experienced observer mused:

One gets the impression that the Swedes have even institutionalized friendship with all their associations which bring people together who would otherwise sit home alone.

Prosperity has not necessarily caused their complications, of course; such complications exist in different attire in a poor environment. But the Swedish prosperity discloses them so much more powerfully by contrast. Can you imagine this situation globally? Just as the

Swedish people, from their avant-garde stance, have all the trappings of unity in a good life yet recognize they are far out of touch with each other in the nation's empty triumph, there is the same tendency among political initiative toward the world body to satisfy only the trappings—economy, education, order, equal rights, peace, ecology; a correctable tendency if we can be educated by Sweden's still developing experiment.

Some might feel this instance grows exclusively out of a Western grain and has no relevance for the East, were it not for Japan.

Japan

Akio Morita, the founder of the Sony Corporation and its leading executive, is a very good choice for *Newsweek* (9 February 1976) to interview about the course of Japan's recent development, for he developed with it from the sunken beginning after World War II to the commanding poise both he and the country now have established in the global economy. Now, thirty years after U.S. occupation began pressing a deep Western coloring into Japanese growth, Mr. Morita reflects:

It dawned on me the other day that the reality of defeat has begun to appear at last in Japan.

He goes on in the interview to describe the dual process of accepting the American idea of freedom and of losing the country's ethical and value-rosetted tradition, the crest of purpose in Japan's youth. With the signature of defeat to Western influence inked in one of the most powerful economies of the earth, our question goes to the source of that influence.

The United States

In the same issue of *Newsweek*, featured in the section called "Ideas", is a description of Daniel Bell's considerations on the American scene. The more and more widely noted Harvard thinker makes an intricate series of observations about the development and dynamic of U.S. life in three spheres—economic, cultural, political—which include one particularly interesting insight. Just as the early capitalists wanted to exploit markets freely, artists beginning in the nineteenth century demanded the "freedom to exploit the hidden interiors of the self", which became so manifest in the 1960s. With the dishevelment of the Protestant work ethic, capitalism meandered more wholly into hedonistic territory where the rebel cultural impulse's expensive material-indulgences and the comfortable, well-paying job's reason for being feed each other; and the lower classes become intent on breaking into this voluptuously bred environment by their authority of 'rising entitlements'.

Dr. Bell wants to control such hedonism by collective responsibility in a public sector, where individual satisfactions are compromised to group needs—a lightweight and often offered proposal which doesn't resonate like a genuine answer. A more interesting possibility of his is paralleled to the artists' continuing development of the exploration into the self,

for if this penetrates deeply, beyond the porches of vital indulgence and ambition, it approaches the true being of the individual, the group, the nation. It is only that, in order to get from the conventional surface to something deeper and truer, one may have to pass through a transition which makes it appear much has been lost.

Since the United States unknowingly has been, in a way of speaking, the father of the developing Swedish and Japanese difficulties through its preeminent economic faculty and organizational genius, the young nation may also be the first to find a way out of the labyrinth—precisely by going in: an exploration of national and individual self that might yield the promise disclosed behind the two countries' seeming aimlessness of affluence.

In the United States there is already some evidence of this transition being attempted in the widely reported spiritual interests of notable numbers of Americans. A relatively recent article of the *New York Times Magazine* has asked, "Are we a nation of mystics?", finding that seven of ten randomly sampled persons have had mystical experiences in the ordinary process of living. Yet one can see it in more mundane indices. An instance is the recent change that has come over the big market of so-called sexual liberation fiction: it is passing into the modesty of idealistically impregnated romantic fiction. As reported in the *Sunday Standard* of February 15th, one of this business's authors whose books have provided seven million reading experiences for her public, feels the reason is that:

People are tired of believing in nothing. . . . All it's gotten them is mental institutions and a tranquilliser habit. My books do not encourage aggressions or violence.

Whatever the full reason or cluster of reasons is, U.S. women are moving away from reading "stark essays on their right to multiple orgasms and are seeking gentler prose".

This might seem trivially indecisive in itself, but such a current appears to be impelling other events; so much so that T. V. Parasuram, the *Indian Express's* columnist of "Letter from America", writes on February 23rd that the American people are waiting for their present leaders to catch up with them on issues like the readjustment of industrial ethics following the Lockheed-led overseas bribe disclosures, the giving of foreign aid to progressive governments without the catches that Kissinger and Ford want to attach, or the screen of UN voting patterns by which they want to qualify nations' needs, and citizens' unlikely support of the administration's proposed punishment for "security leakers" of the CIA, et al. Mr. Parasuram concludes:

In the prevailing mood, the best way to keep secrets is not to do anything the country would not approve of.

GLOBAL INDICATIONS

Yet, with considerable insistence by Americans, including congressmen, on a change in their corporations' behavior, and with the scandal recently acknowledged as a direct affect on at least thirty countries, a global tension is accumulating. For, as frequently observed, if the United States simply disciplines her corporations, those of other countries will appropriate U.S. customers by satisfying sub rosa appetites themselves. On that level a dilemma appears unavoidable, but on another level it raises a different sort of question: Is it only, or mainly, because of competition between corporations that this international corruption cannot be directly ended? Is it possible this whole situation is being developed for us to prepare moving from competitive to cooperative international economic relations? Who can convincingly say that competitive relations are congruent with the evolution of human unity? The focus of energies to see how a cooperative international system would work, how it would resolve factors like the quality of goods (normally stimulated by competition) and the near monopolies of resources (normally necessitated by competition) would certainly be more interesting than trying to wrestle a competitive dilemma to the ground.

Sweden, Japan, the United States and nearly every other country are witnesses to the emergence of dilemmas which insist on solutions beyond the range of their sharp but merely classical horns. A different level. Because we see the possibility of this, it may mean we are latently capable of doing it.

9 March 1976

REVIEW

Toward the Maitreyan Revolution, by Karl Heussenstamm. Los Angeles: International Cooperation Council, 1974. 267 pages, illustrated, \$5.

When nearly everyone has succumbed to a sense of defeat and loss of meaning it is good to hear genuine, forward-looking voices of hope, men who point to signs of life and relevant trends to be realized. Karl Heussenstamm's is one of these voices and he calls his work an attempt at modern prophecy. His of course is not the only one and many things he says have been said, even better, by others. But as another witness to the coming of a world order and the necessary change in attitude—what Buber calls *teshuvah* and the Greeks knew as *metanoia*—he has a right to be heard.

It is an irony that while thinkers in many parts of the world are looking for the reconciling image, the seed-idea from this country, the Indian is virtually a refugee at home. That the end product of our educational policy and practice is a cypher no longer causes any surprise. One, however, recollects Ananda Coomaraswamy's lament harking back to more than half a century: National education is our first priority. But, alas, who will teach our teachers? Perhaps a book like this could.

For himself Heussenstamm has chosen a Buddhist phrase and rung changes on it: the Maitreyan man, age, yoga and revolution. The phrase is perhaps not all that important. What matters is the reality of the change, not the label. What are the marks of this change, on which he leans so much? And what is the evidence that such a change is now underway, indeed that this breakthrough is history's humour, the demand of the Time-Spirit?

Heussenstamm has no doubt that it is so. His book starts from that act of faith. Behind all the dissonances on the modern scene he points to "creative synthesis" as the mantra of the new age. Its clearest mark is inclusiveness, not exclusiveness. Coming rather close to the occult and the astrological, this change he locates in a fresh, exploding awareness of life's synthesis, as if a psychic laser beam is flowing from the superconscious. A new energy or intention is at work to fulfil the needs of a radically new, complex evolving humanity. The Age of Aquarius is come. Everywhere there are signs of a new axial age. Such is the gospel, the newer testament of which the wise have begun to speak, in many tongues.

The synthesis will strike a balance between individualism and collectivism, and between other contrasts as well, which will be seen as complementaries rather than as opposites. Our ideas of law and logic are bound to change. Another mark of the Maitreyan man—the artist-philosopher-statesman of the future—and part of his creative freedom, will be the actualization of unity in diversity. Blending science with spirituality, this will be the

work of creative meditation, what Heussenstamm calls Maitreyan yoga. The truth is old, the forms are many.

The final aim is transformation, the making of the New Being in whose honour it might well be said—instead of the parricide's wail, "God is dead"—that "God is man in heaven and man is God on earth." Here is a secret some humanists could profitably learn.

Obviously a technological society, keyed to commercial and competitive "ego trips", will not allow this. For then its occupation might be gone. But once the soul and the creative spirit in man take technology in hand—and break through the ancient apartheid of what Sri Aurobindo called "the refusal of the ascetic"—new rules of the game are bound to be discovered. Then, with all the beyond mirrored here, history might take on a dramatic meaning.

And old-time adversaries like want and famine, disease and disparity, the identification with a false idea of self will be laid low, and men and society will be ready for the leap ahead. Then, with increasing knowledge, space and time will come to be seen as expressions of the Spirit, subjective media or aspects of the Self, one in all. Such a realization will be truly revolutionary, for it will be a revolution by consciousness. This points to a profounder change than a mere political and economic alteration, a transfer of power and a manipulated State. These leave the inner man where he was and has always been. A revolution that does not touch the roots of being is not a revolution at all, but a Great Illusion.

These days we are avid of technique and methodology, know-how in place of know-why. What, then, will be the technique of an evolutionary, creative art and science of meditation that will release a hidden power and wisdom? Through the actualization of the centers, *chakras* ("Actually, all that man is *is* the chakras", says Heussenstamm), and kundalini, the serpent power dormant in all, we shall be able to realize stages of visualization, imagination, concentration, abstraction, penetration, universalization and discrimination. Men belong to various types and stages of growth and we should expect a variety of approaches to the evolving knowledge—that of the wanderer, the creator, the scholar, the householder, the magician, the server and the teacher. The main thing is to energize the soul contact, self-relatedness, a right focus, the true lotus position. This will of itself open levels and fountains of awareness sealed till now except to the few.

This will mean an integral approach to reality. Such, at any rate, is the evidence of evolutionary convergence as spelt out by Sri Aurobindo and Teilhard de Chardin. Psychophysics will dissolve the dualism that has plagued our recent past and turned history into a chamber of horrors. It is this discovery, of the noosphere, the supermind, that is going to be the basis of world union, this universal practical idealism which Heussenstamm calls the Maitreyan Revolution. Simply, it will replace the lower by the higher self. Without such a change, towards the soul-force, neither capitalism nor communism nor any "ism" can hold for long. Revolution has to come of age. And though their antics and formulations may be far from pleasing or perfect, among today's young one feels the dim outline of a Demiurge.

The idealism of an organic, spiritual brotherhood has no doubt always been. Prophets of a world order are not a new phenomenon. But today their presence has a new bearing, the message has become mandatory. Only by listening to them and attending to "the adventure

of consciousness" to which they point, can we escape sure and certain disaster. One indication of this wind of change, a return to the attitude of vision and transparency, is the wholistic dialogue between the Marxists and the Christians, the cross-fertilization of what is known as "syncon", a sort of world yoga. The world yogis will begin from within and above and realize, afresh, the subjective factor according to which "No man is an Island" and "I am the other." Even in our social existence this alone can heal the wounds of separation, and the crimes and the injustices that follow from it. Not by politics alone can we hope to have the radical cure of what ails mankind.

Kairos replaces *kronos*, the consciousness of the transcendent Man, what our Bauls call "the Man of my Heart" replaces the separative, the natural man. This rebirth of man on a higher level for which we are waiting may be compared to the *rites de passage* or the piercing of the planes of which yoga speaks. A gift of the seer and the prophet, here is the third force—which the world is at last facing up to, since there is no other alternative to survival and progress. Politics, education, art must catch up with this; else we shall be condemned to futility and frustration.

This is the Kingdom, *the* Revolution made possible and inherent in our long, troubled history. Instrument of cosmic forces, man cooperates with the involved and the emergent. To the explorers of the hidden, responsible to the total reality, space, time, motion, energy, matter reveal themselves as psychic. This is the tremendous "Inward ho" first suggested by the seers of old and now perhaps on the way to becoming a universal experience, at least among the elites of mankind, adults of awareness. Here is the supreme discovery of creative radical spirituality. It is a matter of hope that throughout the world one senses the groundswell of a passion for perfection, to achieve levels of awareness, of conscious expansion. When that happens it will have its effects on the political, organizational, cultural, scientific, religious and educational spheres, a grand architecture of Integral Humanism, a true Republic of Man. The way is through creative meditation, dialogue and experiment. Appearance notwithstanding, here is a hope for man and for tomorrow. Not to cooperate with which is to sin against the Holy Spirit and the drive of history. It will be to cheat destiny.

Sisirkumar Ghose

An educator and author, Sisirkumar Ghose is the head of the Department of English at Santiniketan, the university in West Bengal founded by Rabindranath Tagore. His publications include Mystics and Society, The Later Poems of Tagore, The Poetry of Sri Aurobindo, Modern and Otherwise, and many articles and reviews.

FOCUS

DECISIONS OF THE EXECUTIVE COMMITTEE

It is my considered judgement that there is no longer a question of whether or not there will be world government by the year 2000. As I see it the questions we should be addressing ourselves to are, how it will come into being—by cataclysm, drift, rational design—and whether it will be totalitarian, benign, or participatory (the probabilities being in that order).

Saul Mendlovitz, Director
World Order Models Project

The very well attended seventeenth annual meeting of the executive committee on 21 February 1976 commenced with the Mother's music and a short meditation. Welcoming the members, the chairman, Sri M. P. Pandit, drew attention to the fact that World Union is essentially a movement and not an organisation; the organisational apparatus is kept to the minimum. The character of the movement is universal and each participant owes it to himself and to the cause to broaden his own outlook, range of interests, and mental horizons in the direction of universalisation of consciousness. He explained how unity, which is the aim of this movement, is not something to be built up and achieved; it is a fact to be discovered. And this discovery is to be progressively made by a steady deepening and heightening of the consciousness. To create a favourable mental climate for this pursuit is the aim of the journal, seminars, and conferences conducted by World Union through its several centres. It is a constant process of self-education and world-education.

A study of world events with a view to perceiving the growth of the sense of oneness in the peoples is an important part of the programme. Projects like the collection of sayings on the theme of oneness from the literatures of all countries are meant to help in this process. An objective study of the events on the globe today unmistakably shows that there is a definite trend towards the awareness of global unity which is slowly asserting itself in diverse spheres, despite discouraging surface appearances. We must not look exclusively at the happenings of the day; they are merely steps leading to some distant—perhaps not too distant—consummation of unity.

On the question of World Union patrons, concern was expressed in the meeting that "patron" should signify something more than one who gives financial contributions; the term should be reserved for those who have given substantially to the world union movement in

other ways. A classification of life members according to the amount given was suggested to designate exclusively financial contributions.

There was much discussion on the question of what was expected of the youth wings, and on the value of having a separate section for youth, in which youth involvement was agreed to be very important. Guidance from elders should be in the form of dialogue and example which would promote understanding between generations, allowing youth to think out for themselves the ways in which to move towards world union. The meeting decided that a committee of two or three, led by A. B. Patel, would do research and make suggestions for such dialogues.

It was suggested that since *World Union* journal is highly educational, subscription letters accompanied by sample copies of the publication should be sent to libraries of universities and colleges throughout the country. Another suggestion was that donors may give subscriptions to colleges. Dr. Madhava Menon will execute the first suggestion.

Sri Rohit Mehta of Varanasi presented, for comments and suggestions, a draft paper on education—a consequence of the proposals made last June in the Bangalore convention. In the discussion which followed, Col. P. N. Luthra made several valuable and constructive suggestions, with other members also contributing usefully. A consensus was reached that the draft be published in *World Union* to give it extensive exposure and to invite comments. Readers are encouraged to send their comments and suggestions which, along with those made in the meeting, will receive consideration for the amendment of the draft.

Sri Mehta is an author in the areas of political, psychological, philosophical, and spiritual thought, and a lecturer of widely traveled experience throughout India and to a considerable degree abroad. His background, concentrated in the areas of politics, education and spirituality, took its early outlines from the struggle against British rule in his youth, which brought him to prison five times. In a ripeness of experience marked by only twenty-eight years of age, Sri Mehta left politics and began a sustained work with the Theosophical Society, serving as general secretary of its head Indian office for sixteen years. This was at Varanasi, where he founded a college for girls and managed several other educational institutions. Sri Mehta continues to direct some energy from writing and lecturing into educational work and, as a member of the executive committee, was asked to draft this paper on World Union's approach to education. The text is given at the conclusion of this report.

The theme and style of the fifth triennial World Union conference, planned for January 1977, were introduced as part of the next item on the agenda. Its theme, *The Next Future*, will be explored from four broad angles by a seminar of twenty to fifty people. Papers received in advance from the seminar participants will be printed together so the general participants (unlimited in number) can also be well prepared for the range of discussion before the conference. The seminar discussion will take the place of lectures and papers that are normally presented during a conference, and there will be question and answer periods for the general participants—who will be sitting around the seminar circle as observers—at breaks in seminar sessions.

As an outcome of the first national convention of World Union centres of India held at Bangalore in June 1975, and subsequent committee meetings arranged and due procedures

completed, the constitution of the World Union India Centre has been adopted. The India Centre has its headquarters at Bangalore and its first central council, under the presidentship of Prof. N. S. Govinda Rao, is in formation. It was confirmed that the centre began on 21 February 1976, and will concentrate, at least for the next five years, on the national integration of India. For this work it will seek the cooperation of all local and regional World Union centres and also of individuals and governmental and non-governmental organisations with similar aims. World Union International Centre will continue to concentrate on world integration while the India Centre works for national integration. National unity is, of course, imperative for the formation of global unity, and we expect these two aspects of the work to nourish each other. The central council of the World Union India Centre met at Pondicherry on 22 February 1976. Its report and the constitution governing it will be published in May.

For the celebration of World Union Day on August 20th it was decided to suggest that centres use the theme "National Integration" for their symposiums, cultural programmes, and other means of expression. Centres were urged to try to hold their celebrations on 20 August, unless rescheduling it to the nearest Sunday becomes absolutely necessary.

The next meeting of the executive committee will be held on August 14th or 16th; the exact date will be decided so as not to conflict with Sri Aurobindo Society's conference, which is normally during that time. The main item before the committee in the August meeting will be the constitution of the third world council of World Union.

Dr. H. S. Lakshminarayana of the Bangalore Centre read a paper containing proposals regarding the working of World Union. The paper emphasised the need for the movement to be dynamic. Schemes such as social service and education were proposed, with the proviso that any project must be well planned and viable. Finally, several obligations for members were proposed. Many executive committee members felt there should not be any element of compulsion to membership.

It was proposed and accepted that condolences on the death of Karl Heussenstamm in California be sent. He died in an automobile accident on October 19, 1975.

[All readers who wish to make comments or suggestions about the following draft paper on World Union's educational view are invited to send them to the general secretary, World Union International, Sri Aurobindo Ashram, Pondicherry 605002 India.]

AN EDUCATIONAL POLICY AND PROGRAMME

Rohit Mehta

Principles of Education

Since World Union is based on the *fact* of human unity, and not on the concept of establishing such unity, all its approaches to life's problems and situations are motivated by a full recognition of this fact, be they political or economic, educational or cultural, national or international. Behind this recognition lies a realisation of the spiritual unity of man. Human unity based on the spiritual oneness of life is thus the unique approach of World Union towards the manifold expressional diversities seen in the behaviour patterns of the individual or the collectivity.

To recognise the fact of human unity, a deepening of awareness in the realms of human consciousness is needed. It must, therefore, be the function of education, both in its restricted as well as wider context, to lead the peoples of the world to this deepening of awareness. In its practical import, this must mean the awakening of a world-consciousness among those who are involved in the educative process.

The major constituents of the educative process at all levels are the teachers, students, parents, society, and the state. In its educational policy World Union seeks to attend to all these constituents so that they may function effectively from the base of world-consciousness, and not from the base of any narrow perspective—whether national, sectarian, racial or parochial. Thus the main plank of World Union's educational programme is the development of a world-consciousness among both the givers and the receivers of education.

To start with, this necessitates a re-education of teachers and parents so that the very atmosphere of the school and home may be inspired by a sense of human unity which does not allow outer and behavioural differences to separate man from man. Such a sense of human unity must express itself by according full respect to the human individual for what he *is*, and not for what he has. To be real and worthwhile, any education must, in its very basis, treat the child with full respect. When a relationship of such respect exists between the givers and the receivers of education, no problem of indiscipline can ever arise—in homes or educational institutions. It is hardly necessary to say that only with the background of such mutual respect can the work of education come to its true fruition. The development of a world-consciousness becomes meaningless if respect for the human individual is non-existent, or is even slack and perfunctory.

Very often it has been mistakenly said that the development of human individuality would militate against the growth of a world-consciousness. Nothing can be farther from truth, for it is in the free and unfettered flowering of the individual that a new relationship between man and man can come into existence, a relationship free from all divisiveness and exploitation.

Only a free individual can become a responsible citizen, and therefore the educational policy of World Union lays special stress on the free development of the individual based on a true respect for the student at all levels of the educative process. This will bring into exis-

tence a real comradeship between the teacher and the parent on the one hand, and the student on the other.

In the first principle of teaching which Sri Aurobindo enunciated, probably the underlying spirit was this sense of respect in the relationship of teacher and student. He said: "The first principle of true teaching is that nothing can be taught." The function of the teacher is not so much to teach as to awaken a sense of learning in the student. If a teacher sits on a pedestal in order to teach, then he does not understand even the first principle of education. A student can learn, but he cannot be taught. An awakening of a sense of learning in the student is possible only if the teacher himself is in a constant state of learning. Education is a two-way movement—the teacher and the student both learn. It is only as the teacher keeps his own flame of learning bright that he can awaken such a flame in the student. What is said about the teacher applies equally to the parents. The flame of learning can remain bright only if there is constant unlearning. The re-education of the teacher and the parents implies that in them there must be a continuous process of unlearning so that fresh learning may become possible. Learning and unlearning is a rhythm. In true education this rhythm must remain unbroken.

In all schemes of education there are four fundamental factors which need serious consideration. They are:

1. Who will be the educators?
2. To whom will education be imparted?
3. What will be the content of education?
4. How will the system of education be worked out?

As stated above, the educators themselves must see that their flame of learning is never extinguished, and that they have a sense of respect for those who have been put under their charge.

These being the essential qualifications of the educator, we must turn our attention to understanding the nature of the child, for it is the child to whom education is sought to be imparted. The entire basis of World Union is spiritual, which is not to be mistaken for religious. In the terms of this approach, the child is obviously a spiritual entity. He is not a clean slate on which the educator may write whatever he likes. Being a spiritual entity, the child seeks to unfold that which is inherent in him. It is here that the twin principles of nature and nurture must find a living and a dynamic synthesis. While education is fundamentally concerned with the question of nurture, it is essential that this is integrated with the nature of the child. Nature and nurture must not function at cross purposes, for if this happens the true nature of the child will suffer violence as a result. Thus the educator has to be greatly sensitive so as to catch even the subtlest intimations of the child's real nature, and at the same time be so pliable and flexible in arranging for his nurture that these inherent qualities of the child can be brought out.

If nature and nurture are to be synthesised in a dynamic manner, then the question arises: What should be the content of education? It is hardly necessary to say that for such a synthesis, the teacher and the student must become co-adventurers in that land of knowledge which has no frontiers. It was this dynamic synthesis Sri Aurobindo indicated when

he enunciated the second principle of teaching: "the mind has to be consulted in its own growth". Expanding, he said:

The idea of hammering the child into the shape desired by the parent or teacher is a barbarous and ignorant superstition. It is he himself who must be induced to expand in accordance with his own nature. . . . To force the nature to abandon its own *dharma* is to do it permanent harm, mutilate its growth and deface its perfection.

This implies that education at all levels must be carried on with the consent of the student. And his consent will be easily obtained if he is exposed to the full impact of knowledge without any social or other inhibitions and taboos. If a child is surrounded by a free atmosphere of inquiry then he will become an active participant in his own educative process. It is necessary that education should remain linked with life so the student does not grow up in an isolated and therefore artificial atmosphere. He must learn to live in a house where breezes may blow from all sides and yet not be uprooted. In this way alone will he be able to keep himself free from all conditioning factors such as class and caste, religion and race, "isms" and ideologies. The content of education must be such that the student's sense of inquiry is stimulated and he becomes able to find answers to his own questions.

In our age of scientific and technological developments, it is necessary that education correlate science and humanities. This demands a truly integral approach; an interweaving of the two. In the very teaching itself, the student must be enabled to see the limitations as well as the possibilities of science. Such an awareness will help him to come to a just evaluation of the humanities. Similarly, in the teaching of humanities he must grow to perceive the value and place of science. In this process, the mind of the student will be awakened to their complementary-ness, and not regard science and humanities as contradictory.

In current education, culture and education seem to be poles apart so that one cannot say an educated man of today is necessarily a cultured man. Our education is very much intellect-ridden, or to be more precise, memory-ridden. While the role of intellect cannot be underrated, it cannot alone adequately develop the student for the coming challenges of life. If he is not to be lopsided in his development, intellect and emotion must find an integration, a fusion in his life. This lopsidedness will be avoided if the cultivation of a cultural sensitivity finds a proper place in the content of education. It is in the appreciation of beauty, whether in stone, in colour, in sound, in word or in thought, that a person's cultural sensitivity finds avenues of healthy growth. Both the teacher and student should be able to respond readily to all that is good, true and beautiful in life, however expressed—by nature or by man.

The most important question that arises is: How is the process of education to be organised so that the above mentioned objectives may be fulfilled? This demands a serious consideration of both the methods and the organisation of education. Points for consideration in these areas are hereafter outlined.

Methods of Education

Regarding methods, Sri Aurobindo has given a clear guideline. He says: "The third

principle of education is to work from the near to the far, from that which is to that which shall be." In other words, the fundamental principle of any educational method must be to lead the student from the known to the unknown, from the familiar to the unfamiliar. In order to give a practical turn to this method, it is necessary that:

1. education be as informal as possible, breaking down the rigidities of class-system, curriculum, examination and evaluation.
2. the student be enabled to rely less and less on prescribed textbooks, and more and more on his intelligence, and be able to find relevant facts and information by turning, on his own, to reference books.
3. active participation of the student be encouraged, and so to this end the teacher must be in the background, available for consultation and guidance but leaving the student to explore the subject for himself.
4. the libraries of all educational institutions assume greater importance so the student is continually exposed to the best minds of the world.
5. most of the textbooks, particularly history books, be rewritten so as to eschew narrow national or sectarian bias and develop world understanding.
6. education be as far as possible by discovery, for teacher as well as student. To this end, certain projects should be introduced which the teacher and the student can work out together. In these projects both will experience discovery in the subject of inquiry and study. Among the projects that could be taken up are "Discovering the World" and "Discovery of India in the Context of Humanity". Such projects should be at all levels of education; and in the execution of these projects various means should be employed such as exhibitions, films, charts, pictures, models, newspaper cuttings, write-ups, etc.
7. all processes of education aim at the integration of the head, the heart and the hand, and not be just mind- or memory-ridden as is now the case.
8. there be a continuous evaluation of the work of the student, not only by a certain formal examination. In such evaluation, teacher and student should be able to work together.
9. the technique employed, at all levels, be that of discussion, with teachers and students freely discussing all matters concerning the subjects of study. This can be done only through the teacher stimulating students to ask questions; but answers to these questions must be explored and contributed by both teacher and student —not by the teacher just giving his answer.

Organisation of the Educational System

1. Education must be outside the control of the government. While the state must provide the funds, it must not interfere in the academic or administrative aspects of educational institutions. Their autonomy at all levels must be respected by the state and the society.
2. Smaller units should be encouraged so there can be a personal contact between the teacher and student. As far as possible, small residential institutions should be brought into existence. Even the universities should be small and residential.

3. Parent-teacher associations should be established and attached to each educational institution so that teachers and parents may be actively involved with each other in the work.

4. Education councils should be formed in each state, consisting of officials and non-officials, to advise the government on all matters; members should include educationists and intellectuals. It should be accepted as policy by all governments that no legislation or order regarding education would be promulgated without proper consultation with these councils.

5. Since education cannot be separated from life, there is great need to educate the public on these matters. This can be most effectively done by voluntary organisations established for the purpose.

6. Continuation classes should be introduced in India so those in the professions and in business may be enabled to keep abreast of the march of knowledge in different spheres of life. These continuation courses can be conducted partly by correspondence and partly by lectures given by eminent persons in their fields.

7. The idea of open universities should be pursued, since only through such institutions will it be possible to bring forth knowledge on a large scale as required in a country like India.

The Specific Work of World Union

1. Establish small experimental educational institutions wherever circumstances seem favourable.

2. If possible, start teachers' training institutes for the purpose of giving orientation to teachers. If such institutes cannot be started, hold teachers' refresher and orientation courses. These courses should be held in different parts of the country so as large a number of teachers as possible may be involved.

3. Start, as an experimental measure, an institute for training people in the strategy of peace which could offer capable personnel to the state and the society for the establishment of peace at all levels.

4. Strive to open centres in different parts of the country to educate the people about the idealism and ideology of the United Nations.

5. Since larger and larger numbers of people all over the world are seeking the avenues of yoga to solve life problems, it would be advisable for World Union to provide information on it through books, pamphlets, and courses of lectures so that spurious yoga movements may not exploit eager but unknowledgeable people. It should also strive to introduce simple lessons on yoga in educational institutions. Such yoga lessons would not be restricted to asanas and pranayama but would include larger, deeper aspects of the mind and its control.

6. World Union should constitute its own permanent education committee to keep in touch with all related matters and serve as a clearing house for all ideas and plans for educational reform and reconstruction.

7. An educational journal may be initiated for all those concerned with the principles and methods of true education.

ORGANISATIONAL ACTIVITY

World Union Centres

Bangalore In their annual general meeting on March 7th the members of the centre approved an amended variation of their rules and bylaws. This was also the occasion of their annual report which noted their main achievements, among many others: suggesting, preparing for, and successfully convening the World Union movement's first national convention; founding World Union India Centre with offices in Bangalore. They were also candid with themselves about what remains to be achieved: the activation of major work projects, the expansion of membership by substantially large numbers, and an extensive influence of the ideal of World Union among women and youth. Yet the spirit of the annual report suggests they will take up precisely these objectives with an even greater energy now.

Butwal, Nepal The second anniversary of Butwal Centre was marked on 12 February 1976; two other meetings, on 21 and 28 February, were held. In the anniversary meeting, the president said the first year of the centre was a physical preparation, the second a mental exploration, and the third is a challenge of the will to progress into a spiritual domain. What this means was described by the Mother, he said, when she declared that there is one means within the reach of all: change oneself. "Oneself" is that unique and perfectly constituted field of action appropriate to each person—a largely unknown world. The condition for this is an absolute sincerity in aspiration for the realisation. The president felt this to be the first work of each World Union member.

Chakradharpur A remarkably large duo of students' sporting meetings was organised jointly by the World Union and Sri Aurobindo Society centres here. The convener of these events, Sri Swapan Kumar, had to coordinate the activities of about three hundred young athletes on 15 February, when qualifying heats were held, and on 22 February for the finals.

North Calcutta For two hours during the evening of January 20th, song, poetry, painting, and discussion—much of it from children and youth—filled the North Calcutta Centre's monthly meeting. Twelve new paintings of Kumari Krishna Sinha were shown and three members read their own poems. It was mentioned at the outset that these monthly meetings would try to express the spirit of "the next future", the theme which has been adopted by the centre for 1976.

The children's programme began with a bright introductory speech by a fourteen year old girl, Kumari Renu Das. Other boys and girls, aged 6, 8, 10 and 12 years, recited poems and other writings, while several speeches were given.

On the evening of January 25th members organised a cultural workshop, which was the result of the regular activity done in the centre, culminating several weeks of industriousness. Featured were a silence and concentration corner, asana corner, library-study and tutorial class corner, publication corner, oration corner and recitation-symposium and drama corners, fine arts corner, various handicrafts and a small scale industries corner, and a trade and commerce corner. Sixty-eight paintings were exhibited, fifty-two models, and equivalently abundant craft and knitting products—over half, generally, done by children and students. Beautifully designed electric eliminators, sheet metal boxes and an electric heater made by

members were also displayed. During the evening, easels were set up for any visitors who might be moved to spontaneous painting; about six paintings were done.

In the most recent meeting on Auroville's birthday, 28 February, members observed that in two years the centre had grown into spheres of women's and children's group activities, homeopathic medical services, publication activities (e.g., they publish a Bengali version of *World Union*), library and study services, sports and games and, of course, cultural workshops like the one described above. Programmes indicating the development of recitation, writing and speaking were given by the youth wing and children's training centre. Finally, a combination symposium-musical-poetry reading—whose elements were created by five members although mainly written by Sri T. K. Sinha—was tape-recorded by members and produced. Sri Sinha's motif was finding the spirit of future mankind in the perpetual development of consciousness.

Shillong An anthropologist, linguist, planner, and social worker were central figures in a March 7th symposium entitled, "The Importance of Cultural-Religious Factors in Establishing Human Unity" Dr. D. P. Mukherjee, the deputy director of the Anthropological Survey of India; Dr. Subramaniam, director of the Central Institute of English and Foreign Languages; Mr. J. K. Mehata, I.F.S. planning officer from the Himalayan state of Arunachal Pradesh; and Mr. Dey, a social worker of Shillong spoke in several keys. Their considerations were given on the cultural configurations of the evolving human ecosystem, contemporary spiritual relations in Vedic and Upanishadic perspectives, and the correspondence of economic equality and human unity.

Tamil Nadu Smt. Madhuben K. Shah and Sri Keshavlal Tarwady spoke on the relation of the Gita to the psychology of contemporary life in the centre's 25th January meeting. A film about the work of the Krishna Consciousness movement in the United States was screened by a swami from that group.

Uttarpara Uttarpara centre has been addressing itself to the study of unity through the views of a number of religious, spiritual, and yogic traditions for some time. Continuing this widening effort, members met on 8 February to celebrate the birthday and study the visionary life of Swami Vivekananda. The women's wing extended the celebration of the Mother's birthday, on 21 February, by joining with local girl students in performing a dance drama entitled, "Why Is This Mother?" It was written by Samar Basu. Then the next monthly meeting was scheduled on 6 March, the birthday of Sri Ramakrishna. The relevance of his teachings to the movement for world unity was made clear in a talk by Samar Basu, with other speakers focusing on Sri Ramakrishna's life and sadhana.

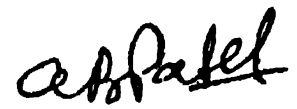
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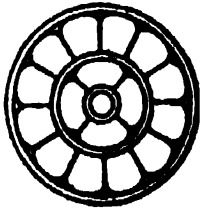
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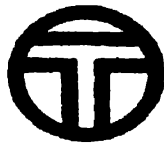
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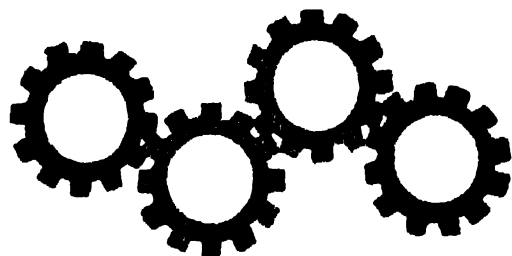
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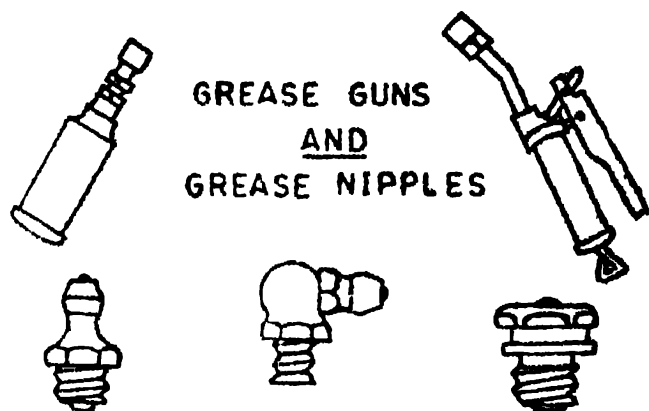
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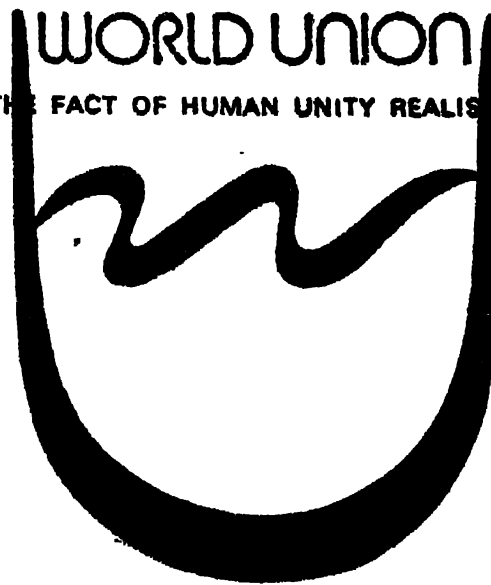
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A WORLD UNION BASED ON THE FACT OF HUMAN UNITY REALISING THE TRUTH OF THE SPIRIT

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EDITORIAL

Transcendental Meditation

John White is an engaging writer who knows his own mind and the mind of his readers as well. There has been occasion to read and comment upon some of his work regarding consciousness and consciousness research. An article of his on kundalini and the work of Gopi Krishna was featured in last month's issue of *World Union*. His mind is awake, open, plastic and, what is more, understands from inside.

Mr. White's most recent book centres around the Transcendental Meditation (TM) movement (*Everything You Want to Know about TM*; New York: Pocket Books, Simon & Schuster, 1976; 191 pages, \$1.95). In the course of his brilliant commentary on TM, he also regards some of the other movements presently engaged in the exploration of consciousness in the United States; this is indicated by the subtitle: *A Look at Higher Consciousness and the Enlightenment Industry*. Though the book is written from a nonideological and positively critical stance, White is truly a friend of TM. His observations are meant to highlight and preserve the core of truth in Transcendental Meditation, disengaging it from the accretions of claims and super-claims made by its overzealous promoters—which is almost an inevitable development when such movements seek to address and enter the mass mind. The author has the background of having been an initiated practitioner of this form of meditation. He has also consulted with teachers and followers of TM and done considerable research before venturing to write what has become a balanced assessment.

In answering the obvious first question—What is Transcendental Meditation and at what does it aim?—Mr. White offers a characteristically straightforward answer. He explains simply the basic perception that there are seven states or levels of consciousness. The first three are those of which we are commonly aware: waking, dreaming, sleeping. The level above, that transcends these three, is the "transcendental consciousness" to which TM gives entry. "Beyond it are still greater states of awareness—cosmic consciousness; god consciousness; and the highest condition that the human mind and nervous system can reach, unity."

TM is not a type of meditation that can be merely read of in books and then

practised. A personal initiation by an authorised teacher is necessary. And Mr. White describes the initiation ceremony faithfully. It may be noted that the "song in praise of Guru Dev" which forms a part of the ceremony is an ancient hymn which refers not so much to the immediate guru as it does to the whole line of gurus beginning with the Guru of gurus—the Supreme Teacher. The hymn serves to invoke the blessings of all the great ones whose consciousness is embedded in the teaching that is being transmitted by the present guru. It is in no sense an indication of a personality cult.

Central to the initiation is the communication of a mantra to the novice. He is asked to repeat it and meditate upon it each day during two fixed periods of twenty minutes each. With this practise there ensues an indrawal of the mind, and the normal stress and tension of the nerves slackens. With steady practise this movement leads to the layers of mind where thought thins and eventually to that silent region of consciousness in the mind whence all thought and creative activity originates. The proponents of TM say that in this way one arrives at the roots of "creative intelligence". Tension and strain of all kinds are left behind and one enters the domain of enlightenment. TM's advocates cite results of laboratory experiments and scientific investigations to substantiate their claim that Transcendental Meditation brings about altered states of consciousness.

But these alterations, say the critics, can be brought about by other means as well. There is nothing special about TM in this regard, they aver. They hold that the very expectation that there will be relief from tension coupled with the mere act of sitting with eyes closed for a while account for the results cited. We demur. One may repeat a mantra, one may sit with eyes closed, one may expect a certain "unstressing", yet still one's state of mind may—and usually does—remain unchanged. Most likely the mind will be filled with a surge of thoughts leaving one disappointed. It is only when there is a definite spiritual spark/impulsion within and behind the mantra that it works. But this spiritual dynamism need not be communicated only through a mantra; in other disciplines, a look or touch from the teacher can do the same. It is the spiritual personality of the guru, working directly or through his representative, that is of real importance. TM is effective—as far as it goes—because of the intrinsic spiritual quality of the power that the Maharishi transmits. No scientific findings or experiments can ever discount or disprove this central fact.

Throughout his investigation, Mr. White is consistently fair in his approach and reasoning. He raises questions that are just and relevant: Is the state of mental silence that TM purportedly provides the enlightenment spoken of in the world's spiritual classics? Does one attain the highest levels of consciousness by this process of meditation? Does the practise of TM give the infallible knowledge,

the immutable poise in the Self, the uninterrupted bliss of which the Upanishads speak? Mr. White is clearly right when he says that the path to true enlightenment is long. Enlightenment cannot be attained in one course or a few more courses of TM. He points out that the experience normally gained through Transcendental Meditation is a "minor peak experience". And it is so. It can open the door to levels of consciousness within and above which call for intenser modes of self-culture and discipline. And these modes have their own overtones, psychological and moral.

Transcendental Meditation is not a fraud or stunt, not an exercise in hypnosis—as some contend it to be. It is spiritual in its origin, and rightly pursued it should open to its practioners higher and deeper levels of being and states of consciousness for exploration, naturalisation, and integration step by step. But the movement and its followers have a long way to go before all the goods TM proffers—universal consciousness, Self-consciousness, unitive consciousness—can be delivered. However, if the aim is simply to release the mind from stress and increase its mentative efficiency, then certainly the ordinary practise of TM is sufficient.

Mr. White makes many interesting observations in the course of his enquiry, as on the difficulties of measuring changes in consciousness—especially of the spiritual kind—with laboratory instruments and methods. Indeed, the nature of an instrument should correspond to the nature of the phenomenon measured or tested. In yoga it is possible to bring about identical physical results by different techniques. And instruments will give superficial and misleading readings in cases where there is a bifurcation of consciousness. On this point the author incisively concludes: "Spiritual life cannot be defined in terms of psychophysiological correlates such as brain waves or the relief of psychosomatic symptoms or increased energy."

While on the subject of the relation of consciousness and the physical body, the writer asks why it is that self-realised sages like Ramakrishna Paramahansa and Ramana Maharishi could be afflicted with painful diseases such as cancer even though they possessed "great peace of mind". He senses the nature of the answer when he suggests that there may be some other factor operative in such instances. There *is*, on the admission of the sages themselves. These diseases represent the residue of the karma of their devotees and disciples—assumed by the gurus in the course of their dispensation of grace—which has not been worked out. It is a law of Nature that, once forged, karma has to be worked out—by the person directly concerned or by the one who takes over that load to free the other from its consequences.

In considering the acupuncture theory, the discussion refers to "energy pathways in the body, called meridians, other than the nervous system". These meridians are, in fact, what are termed the *nadis*, subtle conduits of pranic energy in the human system. They are not the nerve channels known to medical science.

Commenting on the prospects of the Transcendental Meditation movement, the author anticipates its decline after the lifetime of the founder. That, we suppose, is the fate of every spiritual movement unless its truth is renewed again and again in the lives of successors rather than becoming a mere article of faith or a dogma.

In his afterword—full of a refreshing common sense that is quite an uncommon commodity in these matters—Mr. White warns against the certain disappointments that will be experienced by those who seek "instant enlightenment" and expect to find ready-made states of bliss. The way is long and demands a sustained effort of working on oneself. "The practice of awareness never ceases. Enlightenment is an endless process."

One closes Mr. White's book with admiration for the fairness and integrity he has brought to bear on his study, and for the immense service he has offered to the cause of truth. For the truth of Transcendental Meditation stands vindicated in its own right, the avoidable weaknesses of the movement having been mercilessly exposed in the interests of the genuine inspiration behind it.

M. P. P.

PLANNING A RURAL NEW TOWN

Shimon Gottschalk and Robert Swann

One out of eight persons in the United States is poor in the city, but one out of four is poor in the countryside, according to the National Advisory Committee on Rural Poverty. Rural poverty means primarily farm poverty. Landless, jobless, or underemployed, the rural poor suffer from the meagerest diets, the lowest incomes, the most dilapidated housing, the worst schools, the least adequate medical care, and the most blatant racial discrimination.¹ While the nation's welfare and poverty administrators, with their limited resources, focus increasingly upon the problems of the cities, the rural poor are overlooked, if not forgotten.

Yet, as our legislators are beginning to discern, there is a direct relationship between rural poverty and the "urban crisis", a crisis that has resulted in large part from the migration of hundreds of thousands of families from the land to the cities during the last quarter century. These former farm laborers, homesteaders, sharecroppers, and tenant farmers who lack formal education and industrial skills, when forced off the land become victims of an urban system which has little regard for their needs, their skills, their traditions, and their dignity. This applies to Black, as well as White migrants. Modern industrial enterprise is no longer capable of absorbing the large numbers of untrained immigrant laborers in the manner of

1. The pervasiveness of rural poverty, and especially farm poverty, has been documented and analyzed in numerous studies. See, for example, **Rural People in the American Economy**, USDA, Economic Research Service, Report No. 101 (Washington: GPO, 1965), Mollie Orshansky, "The Poor in City and Suburb", **Social Security Bulletin** (December 1967). See also an interesting but different approach to these issues from the one presented here in Niles M. Hansen, **Rural Poverty and the Urban Crisis** (Bloomington: Indiana University Press, 1970).

Shimon Gottschalk has been a lecturer and has done his doctoral work at the Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University. Both he and Mr. Swann are members of the International Independence Institute (III) and are on the board of directors of New Communities, Inc. Robert Swann is an economist and architect who serves as the director of the III. The institute promotes the concepts of trusteeship in land, intermediate technology (of which E. F. Schumacher has been the primary exponent), and monetary reform as put forward in Mr. Swann's article, "Energy, Petrocurrency, and the World Future", which appeared in the January 1976 issue of World Union.

fifty and seventy-five years ago. Tragically, modern agriculture has produced not simply surplus cotton and surplus wheat, but also surplus people.

There are indications that this massive internal migration from rural to urban areas has begun to abate.² Contrary to what is commonly believed, this movement from the country to the city was not inevitable. An agricultural policy which paid farmers *not* to grow cotton and neglected the massive unemployment which resulted therefrom, a policy which has favored and supported technological innovation on large and "efficient" farms, to the near neglect of small family farms, did much to accelerate the internal migration.³ It appears that for many poor families it has been less the attraction of the city than the lack of an alternative that has driven them off the land.

As the cities become less and less of a desirable escape from rural poverty, millions of poor remain, as if trapped, upon the land. The rural new town idea grew out of a desire to develop an alternative to urban migration for these millions. It constitutes an attempt to develop an approach which closes its eyes neither to the need for agricultural and industrial development in rural areas, nor to the needs of the people and the welfare of the community. It is concerned with efficiency not only in economic, but even more so in human terms. Rather than seeking larger welfare benefits and expanded service programs for the rural poor, it posits a social alternative which is primarily fostered from the grassroots up, rather than from the center down.

These, then, are the goals of the rural new town:

- a. To create an economically viable alternative to urbanization for landless tenant farmers, sharecroppers, farm laborers, and poor homesteaders.
- b. To devise new methods whereby small farmers with limited resources may share in the benefits of modern farm technology and industrialization.
- c. To make improved social welfare services available to rural families on an equitable basis.
- d. To decrease rural poverty and economic dependency.
- e. To encourage decentralization and community self-government which will permit the expression of life styles which are independent of those imposed from without, or above.
- f. To reduce individual economic insecurity by eliminating land speculation, absentee land ownership, and systems of tenancy whereby the user of the land is victimized, and by devising an alternative system of beneficial land trust ownership.

2. William K. Stevens, "Farm to City Migration Near End in U.S.", *New York Times* (March 23, 1969).

3. USDA admits that "for the farms with small acreage the price support and farm income support programs can usually make only a limited contribution". *White Americans in Rural Poverty*, USDA, Economic Research Service, Report No. 124 (November 1967), p. 14.

Designing Versus Planning

Innovative planners tend to approach their tasks not only with more or less explicitly stated goals, but also with generalized models of that which they wish to create. Especially for social planners this is a dangerous, but seemingly unavoidable, practice. It is dangerous because it necessitates the imputation of needs, preferences, and desires on behalf of the client system—in this case, the ultimate residents of the rural new town—on the basis of educated guesses, at best. It appears to be unavoidable because, without some preliminary ideas, there can be no planning. The work of the innovative planner, therefore, begins with a design, but this major task commences only when he grapples with the reality as perceived by his clients on the one hand, and the constraints of the environment on the other. In the practice of innovative social planning as here conceived, between the design and the reality which results, there is an all-important process—but rarely a static plan.⁴

The planners-developers of the rural new town in southwest Georgia, that is, the members of the board of directors of New Communities, Inc., have from the beginning been committed to a planning process which assures maximum participation in decision making on the part of the potential and actual residents of the town. The original design, therefore, the "Rural New Town Idea", has served but as a consensus base, a jumping-off point, which in principle is open to change as the community develops.

The Rural New Town Idea

Several villages of 100 to 200 houses will be clustered around a common center where stores and services are located. Within this service core, all essential services which are required by residents on a daily basis are located, within walking distance of their homes. Several such village nuclei are, in turn, organized around a larger center within which more central services are provided.

The farm land spreads out beyond the town in a wide green belt. Adjacent to or within walking distance of each home is a small plot of land which serves the family for its own needs, a vegetable garden, perhaps some poultry and livestock. Beyond these plots are large fields which are cooperatively farmed, using modern farm machinery and the most up-to-date, large-scale farming methods.

The large farming enterprise will provide employment for only a portion of the residents. Industries, commercial enterprises and services, most of which are cooperatively owned and managed, will provide additional employment. One of the major economic bases for the Rural New Town might be its function as the social, medical, recreational service hub of a larger geographic area. There is no thought that this community will become an isolated utopia: non-residents may well be employed within it, and its residents may, in part, commute to work elsewhere. Moreover, it is expected that industrial corporations, governmental agencies and individuals will contract with the town for the development of manufacturing, commercial, and service enterprises. For example, one of the first industries that may be devel-

4. For a fuller discussion of innovative planning, see John Friedmann, "Planning as Innovation: The Chilean Case", *Journal of the American Institute of Planners* XXXII:4 (July 1966), p. 194.

oped in the Rural New Town, with the assistance of outside capital, is the building of prefabricated housing. Eventually, this industry may be expected to serve a much broader geographic area than only the Rural New Town.

The Rural New Town will be established on a large tract of rural land, preferably in an area where the need, and the political basis for such an enterprise appears to exist. Its primary purpose is to serve the people of that locality, not to import residents from elsewhere. Thus, the first Rural New Town is being created upon the political basis of long-term community organization efforts in southwest Georgia. It expects to attract primarily persons living within this area rather than hoping to lure former migrants back from the city.

It is helpful to relate the Rural New Town idea to land reform efforts in other areas of the world. Such land reform programs have frequently foundered due to a unidimensional approach which involves land redistribution only. It has been learned from these efforts that successful land reform can be achieved only when additional capital resources are made available for agricultural credit, to facilitate the modernization of agriculture and for the elaboration of a market-oriented infrastructure. In the case of the Rural New Town, the necessary development capital will be raised partly from government, but largely from private sources, on an eleemosynary investment basis. Charitable foundations, corporations, organizations, and individuals will be called upon not primarily to contribute, but to invest in the Rural New Town on a long-term, low interest basis. Such "social investments", rather than outright grants, are gaining increasing acceptance among the directors of charitable foundations and national church organizations. The Rural New Town will also issue debentures in smaller denominations, which will be available for purchase by private individuals who wish to participate in the town's development. This process was successfully completed by 1972, and over \$500,000 of such social investments from foundations, churches and individuals has been the primary source of capital for development.⁵

Of central importance to the Rural New Town is the concept of the land trust. Whereas residents will own their homes and the improvements which they make on their individual plots, ownership of the land will rest with the trust, which is indirectly controlled by the residents. Residents of the Rural New Town will have full and exclusive usership rights to the land, paying only nominal user fees. They forfeit these rights only when they personally cease to use them. Usership rights may be inherited, but not sold, leased, or mortgaged. The effects of the land trust will be to "decommoditize" the land, and thus safeguard the newly independent farmer's right to his property, regardless of the fluctuations of the harvest or the market. The perpetual trust will guarantee that land cannot be repossessed by creditors in times of hardship. It will eliminate the possibility of land speculation, and absentee landlordism will be permanently avoided.

Many of these concepts are based upon the development experience of the land of

5. At the present time we (International Independence Institute) are working on creating a national fund of such investments, which we expect will reach a \$5 to \$10 million total. It will not only be used for New Communities but for other similar community land trust developments—of which there are now about twenty throughout the United States.

Israel during the past sixty to seventy years. Israel, since the beginning of its modern development, has given priority attention to questions of agricultural development, population distribution, and the prevention of absentee land ownership. The land trust system was pioneered by the Jewish National Fund (a non-governmental organization), and has successfully prevented the growth of a landless agrarian working class among the Jews in Israel. The concept of the Rural New Town, whereas it also has its American precedents among the covenanted communities of the earliest settlers of the Massachusetts Bay Colony, as well as among several experimental projects during the New Deal period, is largely based upon the *moshav* in Israel.⁶ The *moshav* is a somewhat modified *kibbutz*. It differs from the latter in that it does not eliminate all private property and in that it retains the conventional nuclear family within the home.

New Communities, Inc.—The First Years

The story of New Communities, Inc. begins with a man who was born in Albany, Georgia, attended Oberlin College, returned to help his father run a small grocery store, started his own business, and then became involved in the civil rights movement of the early 1960s. Slater King was one of the leaders of the 1962 "Albany Movement", when Martin Luther King brought Southern Christian Leadership Conference (SCLC) staff and workers to Albany to nonviolently challenge the iron grip of legally sanctioned racial segregation in this deep southern community.

From a concern with civil rights, Slater King moved to an ever increasing preoccupation with the issues of economic justice. In these efforts he was frequently joined by Charles Sherrod, the director of the Southwest Georgia Project, which is the rural counterpart of the Albany Movement, in nine adjacent counties. Sherrod, an ordained minister, had moved to southwest Georgia in 1960, in the early days of the Student Nonviolent Coordinating Committee (SNCC), as a rural community organizer.

Under the leadership of these two men, and with the sponsorship of the International Independence Institute of Exeter, New Hampshire, and the National Sharecroppers Fund, in the summer of 1968 a small group of Black leaders from the South traveled to Israel to learn about the solutions to problems of rural settlement that had been developed in that country. They returned, convinced that some of the ideas which had been developed in Israel could usefully be adapted to the U.S. South.

New Communities was incorporated in the fall of 1968 as a nonprofit Georgia corporation. Its original board of directors included not only all those who had traveled to Israel, but also representatives of such organizations as the Federation of Southern Cooperatives, Southern Christian Leadership Conference, the Southern Rural Project, and, in an advisory capacity, the Southern Regional Council. This board of directors has been expanded since

6. The history of the covenanted community in America is elaborated by Page Smith, *As a City Upon a Hill* (New York: Knopf, 1966). For an example of a New Deal precedent, see Edward Banfield, *Government Project* (Glencoe: Free Press, 1951).

then so as to include an ever increasing number of residents of southwest Georgia, and potential citizens of the Rural New Town.

Slater King was killed in a tragic automobile accident in March 1969. But prior to his death he was able to take an option on behalf of New Communities, Inc., on a 4,800 acre farm, some 20 miles to the north of Albany. Later that year, an adjacent tract containing 927 acres was added to the original acreage. In the meantime, New Communities met with success in its application for an initial \$98,000 planning grant from the Office of Economic Opportunity (OEO).

Formal planning commenced in the fall of 1969, under the guidance of a consulting firm, John McClaughry, Associates. Architects, educators, agricultural experts, city planners and many other kinds of professionals were brought to Georgia, not so much to see the land as to consult with and to learn from the potential residents. The climax of these efforts was a "charrette", an intensive, encounter group type of planning session held for several days on the farm in the winter of 1970. The result was a first planning document which was submitted to OEO for further funding in the summer of 1970.

During this same period, intensive community organization activity was taking place within the nine county area, seeking the ever-increasing involvement of prospective settlers in the decision making processes. The OEO planning grant had provided for a staff of six community organizers who were recruited locally. With the help of loans and financial guarantees made by national church groups, voluntary agencies, and a major charitable foundation, New Communities was able to exercise the option on the properties in January 1970. That same year the first several families moved onto the land, and from that early spring, the farm has been under production. A contract for the first 102 new housing units was signed only a few weeks after the first crop of watermelons had been harvested and while a bumper crop of peanuts was being brought to market.

Today, in 1976, after some six to seven years of work and experience, New Communities, Inc. has succeeded in developing a successful, diversified farm program which utilizes about 2,000 acres (much of the rest is woodland) of its total land, and an intensive vegetable plot of several acres which grows food not only for its own needs but for a roadside farm market. In addition, a plant nursery supplies seedlings for the farm and also sells seedlings to the surrounding farmers. The farm also acts as a cooperative marketing center for surrounding small farmers who would otherwise not be able to market their produce as effectively.

On the social side, a school for teenagers from the surrounding counties has been established which not only provides basic education but also teaches pride in Black history, and provides opportunities for work on the farm to gain practical experience. In addition, the farm workers have a program of self-training in farm operations in order that each worker/member will gain an overall perspective of the farm and its problems. A nursery school for small children provides not only farm workers with day care, but also for the children of families within the surrounding community.

Beyond these concrete accomplishments, the hopes and dreams (new housing, small industry, etc.) remain just that—a dream. Two problems have restrained further development

of the plans and hopes of six and seven years ago. One of these problems derives from the original high cost of the land and necessary "debt service" to pay off the borrowed money. It is difficult enough for the most experienced of farmers and entrepreneurs to repay loans on farmland inflated with "development value" far beyond the real agricultural value of the land. While the potential for realizing a return from this "development value" (housing and industry) remains, it requires a great deal of experience, money and knowledge to capitalize. So far, not enough of these resources have been available for New Communities, Inc. to accomplish its dreams; but for some who predicted that such a tremendous undertaking by largely poor and inexperienced people would be a failure within a couple of years, the very existence and continuation of New Communities has been "a miracle".

Conclusion

This brief summary of the first years of New Communities, Inc., has hardly touched the seemingly incessant crises of money, staff, and political opposition which a project of this nature must inevitably face. But that is the subject of a different report and of another analysis.

Undoubtedly it is too early to speak in perspective. Many of the most important problems—aside from the central issue of economic survival—still lie ahead. How and by whom shall future settlers be selected? How can social innovation be nurtured, yet excessive isolationism be avoided? What shall be the political and legal relationship between the town and the otherwise sparsely settled county? How and when can full authority for the town's development be transferred from New Communities to the residents and their elected representatives? These and endless other problems have yet to be fully resolved.

This is an effort to establish alternative and relatively independent institutions to serve the poor within the context of the pervasive larger society. It constitutes an experiment in initiating social change at the grassroots, rather than at the center—the national policy level. Full and legitimate participation, not tokenism, is essential to its success. Similar to community development corporations which have arisen in many other rural and urban areas of the country, its ultimate goal is not increased welfare but rather economic and social self-sufficiency. While this first Rural New Town is predominantly though not exclusively nor ideologically Black, it might have been otherwise. The implied criticism of a social system which permits hunger and malnutrition, in the midst of the greatest plenty that mankind has ever known, is real. But the call is not for the destruction of that society, but rather for the creation within it, at first only in microcosm, of new, more just, more authentic social institutions.

ONE DAY

Seven Poems

**Peach-gold and soft, opens like a flower the sky
To a risen sun; heavens of the deeper heart unfold
Under the influence of a near, ascending star.**

**Shades of yellow and silence accent early day
As they do the inscape of a sight still partial
And young in light; the quiescence of noon
And the fullness of the sun are yet a dream
Of the assured and graceful luminance to rise.**

**A haze of whitening yellow
Attends the slow rise of day
Into a sky of pure summer
Heat; massed, morning rays
Assault indifferent sight
With serenity and wideness
Unbordered by colour or cloud.**

**The weight of light unborne descends in strength
Impelling change with a destroying kiss of flame;
Red grace beyond sharing, terrible and divine.**

In a vague gathering of evening
Slowly fell the rain of darkness
Upon the tired light and soil of day;
Yet earth and sun drank that failing
Downpour like the grace it was, less
From need than readiness of clay
And brightness to absorb unending
Love. A twilight storm brought fullness
Through a stark translucency of gray.

Muted coral and lightened gray
Remember in a late sky the storm;
Musing on the gold and swallowed sun
Dreaming in the calm heart of night,
The sky within colours that without.

A phrase of light spoken by the dying sun
Fires the sea and stirs a gathering night
To deep and sombre reflection of golden death.

Tatsat

An American member of the Sri Aurobindo Ashram since 1971, Tatsat serves as an assistant to the editor of World Union. A series of his poems appeared in this journal last year, and he has contributed reviews to several periodicals.

LIFE/DEATH: THE TAO OF ALTERED CONSCIOUSNESS

Robert A. Smith, III

Life/death or immortality/mortality are treated as the constant dichotomy or dualism. This invites many questions. It also poses the problem of who can investigate these questions.

What changes do we anticipate or need in educational processes, institutions, and among educators to help overcome the life/death dichotomy?

What kinds of human, animal, or plant models and what practices should we be creating to use as guides for expanding our consciousness so that it embraces life and what we now term death?

What can we do to expand our human potential for life and death?

If death can be considered an evolutionary building block in nature, why not also in man because man is part of nature?

An operations planner and organizational behavior analyst with the National Aeronautics and Space Administration (NASA) in Huntsville, Mr. Smith is also an adjunct associate professor with the Graduate School of Administrative Science at the University of Alabama. He serves on the editorial boards of Fields Within Fields and Futurics, and is an associate editor of Human Dimensions. Mr. Smith's articles have appeared in several books and many periodicals.

What can animals and plants teach us about death when we have found ways to communicate better with them?

What can the search for man's relatives or extraterrestrial life among the stars teach us of death?

These are to me fundamental questions usually ignored in our abstract discussions of death.

Jung, Reza Arasteh, and Oliver Reiser use the gnostic ring, the number 8, or the symbol of infinity.¹ Life and death, to use a beautiful metaphor by Enrico Garzilli, are "circles without center" or, again, the symbol of infinity.² Transcending space, time, and consciousness, man becomes everyone and Godlike in the unconscious and in death, his altered state of consciousness. The symbol of infinity might be termed the constant tao.

Death has been treated as the labyrinth for man because its pattern with life has not been recognized. Like Icarus, we become lost in our own creations of death and reenact the tragedy—an immanence without transcendence. We (the most of us) are not Blake's innocents "seeing the World in a Grain of Sand and a Heaven in a Wild Flower" nor do we "Hold Infinity in the palm of [our] hand." This Icaruscan philosophy has held forth strongly in a civilization which separates mind from body. The separation makes us try either

to forget death or make mythologies about the transcendent mind.³

Stanley Dean asks: "Is there an ultra-conscious beyond the unconscious?"⁴ Dean then proceeds to tell us about the similarities of Walt Whitman's "ineffable light", Dante's and Milton's views on Paradise, "Brahmic Splendor" and Bucke's "cosmic consciousness". These certainly refer to a trans-humanizing consciousness, giving man the pantheistic knowledge of God or the "cosmic lens" described by Oliver Reiser.⁵ Gopi Krishna calls it a unified field principle which overcomes cartesian dualism.⁶ It is Krishna's feeling that heightened consciousness makes one aware of being an integral and infinite part of cosmic energy, "the creatrix of the universe", and as such man could never be apart from it.⁷ Huston Smith expresses it thusly:

If the emergence of memory counters Transcendence to some extent, might a further development not counter it more? If human consciousness enables us to step back from consciousness one step in self-consciousness, might not further developments enable us to step back a second step into ecological-consciousness and a third into cosmic-consciousness, thereby progressively countering insignificance?⁸

To continue our "psychic odyssey" and explore the extended nature of man, let us consider why death has always been considered a journey.⁹ To be perfectly frank, there have been profiteers among those who "sold tickets or provided passports for salvation" to the millions of seekers. These profiteers have promised much but departed before passports were needed. Death has been

treated dualistically thereby enabling the profiteers to double their profits. But when death and life are viewed taoistically, there is neither separation nor journey but infinity. My birth (alpha) and my death (omega) are the circles without centers, the gnostic rings of infinity, the God-in-man and man-in-God as one, or Oliver Reiser's "bi-polar immortality". Lee expresses it as death and birth taking place simultaneously or "death is in birth and birth is in death".¹⁰ John White asks that immortal question "Who am I?" and answers: "I am the universe; I am universal mind".¹¹ As universal mind Lee's taoistic view of life/death is true. Death is complementary to life and, with it, forms the single reality, or the creative synthesis.¹²

Only out of dialogue between life and death can come a disenchanted hope adequate to guide men through the technological and cultural crises in which they are now living and enable them to realize the true resurrection of the body of which Norman Brown speaks so eloquently.¹³ The mirroring of mind and reality was best expressed by Jesus: "What you loose on earth is loosed in heaven", and, in "this spiraled fire I reap the whirlwind of all the worlds".¹⁴ Man, the son of God, "spins fragile webs that somehow link all worlds" and when he overcomes cartesian dualism he will fulfill his divine mission in the constant tao of mind and spirit.¹⁵ The "avatar" who is guiding us toward this fulfillment is Oliver Reiser and his Cosmic Humanism, a philosophy which "offers itself as an emerging philosophy of synthesis, a social lens to focus and unify human vision, thus giving coherent form to collective aspirations and purposes".¹⁶ For cosmic humanism is a transaction, a moveable synthesis, a gestaltic vision of the man/god and of life/death. Reiser's "cosmic emergence of mean-

ing is inspiring . . . [and] of a purpose which bears on eternity".¹⁷ It is Polanyi's "tacit dimension" operating at the cosmic level.

I have expressed what death means to me. If life is the groom and death the bride, their marriage is infinity, the alpha and omega circles without center.

References

1. Carl G. Jung, op cite.; Oliver L. Reiser, **Cosmic Humanism** (Boston: Schenkman, 1966); and A. Reza Arasteh, **Final Integration in the Adult Personality** (Leiden, the Netherlands: E. J. Brill, 1965).
2. Enrico Garzilli, **Circles Without Center** (Cambridge: Harvard University Press, 1972). See also Jacob Needleman, **A Vision of the Cosmos** (New York: Doubleday, 1975).
3. Gregory Bateson, **Steps to an Ecology of Mind** (San Francisco: Chandler, 1972).
4. Stanley Dean, "Is There an Ultraconscious Beyond the Unconscious?" **Canadian Psychiatric Association Journal** 15 (1970). See also Jung Young Lee, **Cosmic Religion** (New York: Philosophical Library, 1973).
5. Kathryn Gibbs Harris, "Sources of Integrity in the Scientific Humanism of Oliver Reiser", **Visva-Bharati Quarterly** (January 1971).
6. Gopi Krishna, **Kundalini: Evolutionary Energy in Man** (Berkeley: Shambhala Publications, 1971). See also Anton T. Boisen, **The Exploration of the Inner World** (New York: Harper, 1952).
7. Ibid., Krishna.
8. Huston Smith, "The Reach and the Grasp: Transcendence Today", in Richardson and Cutler, eds., **Transcendence** (Boston: Beacon-Press, 1969).
9. The term "psychic odyssey" is used by Alan Vaughan in "2001: A Psychic Odyssey", **Psychic** (September 1972).
10. Jung Young Lee, "Death Is Birth and Birth Is Death", **Systematics** (March 1972). See also James Hillman, **The Myth of Analysis** (Evanston, Illinois: Northwestern University Press, 1972).
11. John White, ed., "Introduction", **The Highest State of Consciousness** (Garden City, New York: Doubleday, 1972).
12. Preston Harold and Winifred Babcock, **The Single Reality** (New York: Dodd, Mead, 1971); and Herbert Fingerette, **The Self in Transformation: Psychoanalysis, Philosophy and the Life of the Spirit** (New York: Basic Books, 1963).
13. Kenneth D. Benne, **Education for Tragedy** (Lexington, Kentucky: University of Kentucky Press, 1967); and Norman O. Brown, **Life Against Death** (Middletown, Connecticut: Wesleyan University Press, 1959).
14. Joseph Chilton Pearce, **The Crack in the Cosmic Egg** (New York: Julian Press, 1971).
15. Roger W. Wescott, **The Divine Animal** (New York: Funk & Wagnalls, 1969).
16. Oliver L. Reiser, **Cosmic Humanism**. See also Sri Aurobindo, **The Mind of Light** (New York: E. P. Dutton, 1971).
17. Michael Polanyi, **The Tacit Dimension** (Garden City, New York: Doubleday, 1967).

THE ROYAL PYJAMA'D HORSE - III

Maggi Lidchi

Chandrakant tried to gallop as fast as he could so as to put some distance between himself and Pomegranate. When he looked back she was quite a distance behind him, but he kept on hearing the fluttering of her wings so he knew he must be hearing the sound in his head. It was not the less disagreeable for that and he started seriously thinking about how to coax some kind words out of his heart for her. But he saw immediately that it would be much easier for him to subjugate the world than to do this. And yet it had to be done, for the very idea of crossing the whole continent and coming to India, to the main court of the Royal Bengal Tiger, with the old bird still in his wake drove him frantic. Then he was suddenly very tired. For, what was he galloping for if all his life he was to wear on his brow for everyone to see this red proof of his idiocy? He skidded to a halt; since there was now nowhere to run to he might as well rest and crop some sweet grass. But even before he had come to a full stop something had cannoned into the back of his neck. He felt a chaotic clawing on his back and then Pomegranate settled on his right shoulder.

"What do you think you're doing?" he shouted.

The old girl looked more disordered and ill assorted than ever as a result of her crash landing, and he might have taken pleasure in her discomfort had it not been that the sight

served to remind him of his position.

"Pomegranate do you really imagine that I'm going to say, that I'm capable of saying, something kind to you?"

"To you; to you. I don't suppose so. It doesn't look much like it, does it?"

"Well then get this feather off and get off yourself."

"Yourself. I can't; don't you think I'd take it back if I could? I want it back. I look a sight without it." It came as a surprise to Chandrakant that Pomegranate knew what she looked like.

"Look here I know I shouldn't have made a promise which I couldn't fulfill in exchange for the feather but I wasn't thinking."

"Wasn't thinking. That's all right. I suppose neither of us was thinking."

"But why did you extract a promise from me?"

"A promise from me. Well I had to didn't I? Otherwise I couldn't have given you the feather."

"Why?"

"Why? That's the law."

"What law?"

"What law? Heavens boy don't you know anything? Well if you don't I can't explain it. But something had to be asked in exchange for something you wanted so much, otherwise I couldn't have given it. I wouldn't have been allowed to. So since I had to ask for something, I thought I might as well ask for

the thing I most wanted. It was pretty clear that I wasn't going to get it any other way. And now I'm stuck with your promise."

"What do you mean you're stuck with it. *I'm stuck with it.*"

"I'm stuck with it: I have to collect my debt whether I want to or not."

Chandrakant thought it pointless to ask why. She would say the law.

"So we're stuck with each other", he said.

"So we're stuck with each other." The resigned matter-of-factness of her voice made it sound as if he had committed himself for life. For life!

Just before he went to sleep the question he hadn't asked rose up in one great despairing "Why? Why Pomegranate?"

"Why Pomegranate? Why what?" she asked bringing her great beak out from under her wing.

"Why do you have to collect your debt whether you want to or not?"

"Whether you want to or not. Because we are bound by that feather. And every time kindness stirs in you I can feel it and my dead heart starts throbbing and hurting. Parrots are born without hearts. That's why we repeat everything other people say to us. And if a truly kind thing is said from the heart, we can repeat that and then, sometimes, something opens. By the time I've repeated three kind things I'm sure it'll happen, and then I'll have a heart."

Chandrakant listened in amazement. "But why on earth do you want a heart Pomegranate?"

"Want a heart Pomegranate? Yes I do. What else is there to want. But that's a long story and now I'm going to sleep. I've had a hard day." And with that she hid her head under her wing and refused to be drawn into further conversation. And she went to

sleep. But Chandrakant didn't. In spite of his hard-galloping day he was so amazed at the idea that anybody should want a heart that he lay awake staring up at the stars.

He had finally plumbed the depths of Pomegranate's eccentricity and it filled him with a sense of universal mystery. That animals should be so various! That some should want a heart! What good could that possibly do anybody? Certainly none when you had a real mission. Just as well that it wasn't contagious. Poor Pomegranate. The silly maudlin creature. Chandrakant pictured the parrot, heartfelt tears welling from those bright unblinking eyes of hers, and grimaced. But after all if it was a heart she wanted he had no objection, and if the only way for him to free himself was to try and help her get one he would start trying from tomorrow. He began to feel magnanimous. Why not tonight? He was about to wake her but the memory of what she looked like with her feathers ruffled and her eyes red from sleep made him abandon the idea.

Next morning he awoke with a stiff neck where Pomegranate had crashed into it. Stupid bird. If he had to cross a continent with her crashing into him every time he stopped he would end up in tatters. He got up in a very bad mood indeed and stamped about and pawed the earth in order to wake Pomegranate because he wanted to tell her a thing or two about crashing into other animals and that, if she couldn't keep her eyes open and land in more appropriate spots, perhaps she'd better try and get somebody else to help her get a heart. But when he saw her bedraggled head emerging from under her wing and her great hooked beak working away at her feathers he felt so annoyed that he couldn't say anything. He merely rolled his eyes and turned his head aside. He couldn't look. And

he knowledge that he had to cross a continent with her was constantly with him, sort of glued to the lump that the lumpy animal had left in his chest. As the fox had said, it was no good trying to recruit other animals until he had solved this one. More than anything else in the whole world Chandrakant hated being laughed at. And what annoyed him now was that Pomegranate fluttered around getting her breakfast, picking at berries from this shrub and that as though she had a perfect right to be here. She was entirely insensible to the favour he was doing her.

"Do you have any idea what you did to my neck and shoulders yesterday you stupid parrot?" he suddenly screamed, flying into a rage that had him pawing the ground and stamping and sending lots of red dust up into the air. Pomegranate interrupted her breakfast and fluttered over to him in her untidy way to examine his wounds.

"You stupid parrot? Oh yes, there are some scratches. You want to keep them clean. It's best not to kick up so much dust. Wait, I'll put a poultice on it." He watched her palefully while she mashed up some berries and spread them on a big leaf. She then placed it on the stiff part of his neck. This was soothing enough to the sore place, but that sore part was small. It only served to inflame the huge inner wound more grievously and he resumed his stamping and pawing, running around in a small circle until his eyes were bloodshot again and he was even frothing a little at the mouth. Then suddenly he felt completely exhausted and had to lie down.

"I simply can't go on like this." He thought, "I'm losing my strength; that wretched bird will be the death of me", and once again he regretted having saved her life.

Perhaps she could drown in the sea once they crossed the continent? For one thing was sure, whatever else might happen he could not come into the presence of the Royal Bengal Tiger without first having got rid of Pomegranate. And yet if she were to drown before she got her blasted heart, he might never get rid of the feather. Perhaps she could drown as soon as she'd got her heart. Ideally the whole thing would be over before they got to India but in the meantime he must be sure that she kept in good condition and that no harm came to her.

"Pomegranate", he said opening his eyes. "Are you all right? Have you had enough for breakfast?" It had been some time since he'd heard her fluttering and he wanted to make sure she hadn't been carried off by some wild animal. There was no answer. "Nothing but trouble", he thought. "She brings me nothing but trouble. Now I'm nursemaid to a has-been parrot!" But he got up swiftly, alarmed at the thought of her peril and his.

When she came fluttering back, screeching "Breakfast. Yes", he was so cross at his alarm that he refused to explain.

He lay down and closed his eyes; and when she opened her wings to fly off again he said in a voice accusing her entirely, "I'm too tired to travel today. I'll have to rest."

"I'll have to rest."

"Just for one day, for one day", he said "could you not repeat my phrases."

"Repeat my phrases. I'm sorry Chandrakant but even if I wanted to I couldn't stop."

"Why? Why not?"

"Why. Why not. You know why. You might any moment be taken unawares by kindness and you might speak to me."

"You don't really believe that?"

"Believe that. Of course I believe that. I have seen many people taken by surprise by

their own kindness. Only they never spoke to me. In fact it's the only way it comes. When they plan, it doesn't work."

"In that case . . ." but he couldn't finish his sentence. He just lay back overwhelmed by the enormity of his task: to be taken by surprise with kindness for Pomegranate. If only he had been left to subjugate the world. He could have done that so well, so easily, had he been alone. Once again he saw himself being received and recognised by the Mighty Tiger. And even now, even now all that stood in his way was a lunatic bird. How could he be taken by surprise with kind words for her? He turned over onto his side thinking moodily that it could take him days, months, perhaps years of planning to get something kind out of himself for the wretched fowl. Perhaps a whole lifetime. And perhaps he never would. A lifetime wasted.

Maybe the mad bird was right. Perhaps the only way *was* to take oneself unawares by kindness, and he thought that as soon as he felt a little stronger he would try and surprise himself. How did one surprise oneself? He tried to think of the times that he had been surprised in his life. He remembered being startled by Mad Billy who used to hide behind trees or bushes and wait for you to have walked past before charging. But how could you surprise yourself like that? Anyway, that was not exactly being surprised with kindness. And then he asked himself whether he had ever been surprised by anyone's kindness, and what he found was this: he had never been surprised by Mukund's kindness or that of the wild mares or anyone else's. He had always thought that that was the way things were and the way they should be. Something like surprise stirred in him at this. And this surprise . . . but before he could ask himself what it was, it

had vanished and he was left with a strange uneasiness. Then he went to sleep.

When he woke up he was lying on his back with his legs up, looking at the sky through the leaves of a tree. He felt rather better. A bright smudge in the tree told him where Pomegranate was perched. He was a little annoyed that she *wasn't* looking at him but he was not yet sufficiently awake for it to be serious. He merely noted that she should have been guarding him more attentively and that if a wild animal had attacked him she would have lost all hope of procuring a heart, and had no one to thank for it but herself. This thought gave him a certain amount of pleasure, but not very much. As I have said he was only half awake, or perhaps the following question would never have come to his mind at all. He wondered whether Pomegranate had ever had anyone like Mukund or the mares in *her* life. But he was too embarrassed to ask. So he merely called out in a half jocular, half insulting tone, "Hey you up there, Pomegranate. How is it that parrots don't have hearts?"

"Don't have hearts? Well now," said Pomegranate, "that's a good question. You see it's like this. It's a vicious circle. I suppose it's because we can talk and repeat things and this amuses and entertains just about everyone. And so they come to us for amusement and not for things of the heart. And I suppose that if we ever had hearts they died out because the heart is a muscle as you know and if you don't use it, well I don't know what happens to it but, it just doesn't work anymore. We repeat all the crazy things that people want to pretend they're not saying. But we're saying them. And then that's us." She stared down at him unblinkingly and without expectation. "That's us. I suppose you never thought of that?"

"No. When you're going to do what I have to do you don't have much time to think of that sort of thing."

"That sort of thing. What do you think about?"

"Oh, important things like subjugating the world and my meeting with the Royal Bengal Tiger, but I realise all that's rather difficult for you to understand. I mean it's pointless explaining something global to someone whose only concern is getting a heart." And yet when you're alone on a long journey with only one other person it's difficult not to try to explain. Chandrakant found that it clarified his own ideas to be able to talk to the parrot even when she didn't seem to be listening much.

"You see a heart's all very well for someone who has no vision," he would say, "and I'd help you better if I could, but I've got my heart and I don't have to think about it which is a good thing I suppose or I'd be mooning around all day." He mimicked the parrot's screeching voice: "Heart. Heart. Give me kind words. I want a heart", and the idea delighted him so much that he laughed uproariously and, I'm sorry to say, somewhat raucously. Anyone more sensitive than Pomegranate would have been seriously jarred, but she merely stared at him with her head cocked while he kicked up his heels and ran around in a circle laughing and shouting "Heart, heart . . . kind words", spluttering in between. It took him a good ten minutes to recover, and when he had finished he was panting harder than when he'd been galloping all day. But when he'd lain down for a while he got serious again and felt the need to speak.

"You and your heart Pomegranate, while my destiny languishes. A parrot looking for a heart. Just what I don't need. Of all the . . ."

"Of all the . . . of all the . . . of all the ironies", supplied Pomegranate who was good at words.

"Yes. Yes, I suppose that's about it", said Chandrakant, pleased with the new word and annoyed that it had been supplied by the stupid bird. It created a slight confusion in his brain for he wanted the old parrot to say more words like that so that he could learn them to say to the Royal Bengal Tiger, but he didn't know how to ask without losing face. At last he said, "Since we're resting today and won't have time for words when we're travelling, Pomegranate, you may if it amuses you go on with your screeching and jabbering. Don't do it so loudly that it disturbs my thoughts but don't mumble below your breath because that's very irritating." He was pleased with his subtlety, and looking up at the sky thought how lucky the world was that its coming ruler had all the talents that could be asked of him, and a few others. He was savouring the discovery that he was astute and had keen political sense and the ability to understand all sorts of different animals, not only the pyjama'd zebra fish with whom it was natural that he should have some affinity, but the clever fox and the stupid birds as well. He could make them all do his bidding. But while he was reviewing himself, a sort of lump grew in his chest and he wondered if the grass in this part of the country was giving him indigestion. It was such a disagreeable feeling that it threatened to quite spoil the day which he had just been beginning to enjoy, but he went on with his thoughts and what came to him was this: he must never let anybody ask "Why?" He was still trying to push away the lump when Pomegranate started speaking to herself.

"That's very irritating. Well I'm not quite sure what I should say today not too loud so

as not to disturb Prince Chandrakant and not mumbling, but perhaps since Chandrakant is a royal pyjama'd zebra I'll give a poem of Roy Campbell, which is about you. What a good thing that I have a retentive memory."

Chandrakant was about to protest about the word "zebra" but he was trying to remember the word retentive and in any case Pomegranate was already speaking. She sounded even stranger than usual. She held her head further to the side than was her wont and then she began moving it from side to side as though she were weaving the words with her great beak and her crest. Chandrakant stared at her open-mouthed. He thought that her queer old mind had finally cracked and he was about to shout at her to stop when he noticed that though her voice was grainy it didn't jar as much as usual, and then in spite of himself he was listening. This is what Pomegranate was saying:

From the dark woods that breathe of
fallen showers

Harnessed with level rays in golden
reins

The zebras drew the dawn across
the plains

Wading knee-deep amongst the scar-
let flowers

The sunlight zithering their flanks
with fire.

When Pomegranate paused he thought he'd better put an end to this because it was having the strangest effect on him. It felt as though she were talking about him, yet he didn't want her to talk about him like that. But this thought flashed through his mind and then in a moment he was listening again as Pomegranate went on:

Flashes between the shadows as
they pass

Barred with electric tremors through
the grass

Like wind along the gold strings of a
lyre.

And as he listened more and more he got the feeling that this was him and Prince Chandrakant had disappeared, and then he slowly came out of the spell she had woven with her beak and he wanted to ask her to do it again. He wanted to feel the flowers and hear that part about his zithered thighs. It was as though he were the small Chandrakant that he suddenly saw clearly again trotting to Mukund in the early morning before he'd learned of his great destiny. But he couldn't ask her to do it again because he couldn't speak. And he couldn't speak because he couldn't say anything in the same way as Pomegranate, weaving his words in the air with his head, and he didn't want to dissolve the pictures which were now floating brightly all about his head.

When he finally could speak he said, "Pomegranate." But the sound of his voice jarred him fully awake and he suddenly felt that he was in terrible danger. He started shouting, "Why did you do that, you witch you? What did you do?" Then he jumped up and galloped away from her as fast as he could because he knew now how treacherous she was. A leader must never sleep. He would keep his eyes skinned.

But even from a distance he could feel that he was still under her spell. That's what she'd been doing with her head, casting a spell over him, and he galloped around and around as fast as he could in order to shatter it. But as soon as he stopped all the bright pictures tried to form for him again and so he galloped and galloped some more until he was utterly exhausted and fell down and

went to sleep. As soon as he was asleep the bright pictures which had been waiting on the edge of the circle he galloped closed in on him, and this is what he dreamt:

The sun was just coming up over the hills and Buttercup, the mare who had taken a special interest in him when he was just a little Royal Pyjama'd foal, was licking his face and he ran away from her and stood knee-deep in flowers, flowers such as he had never known. As far as his gaze could reach were flowers, and there were other beautiful pyjama'd animals that he'd never seen before—and then with a shock he recognised them. A small herd of royal pyjama'd horses ran and played among the flowers; they were his brothers. He'd never seen another animal like himself, and he'd seen himself only as a shadow in the river. They were smaller than he would have imagined but just right and beautifully proportioned, and as they ran they caught the sunbeams on the light

part of their backs and flanks, which shone like the running river in the morning. Far beyond the flowers, were crowds which he could neither hear nor see and he knew that they were waiting for him to speak, but he didn't want to go. There was only one animal he yearned to meet and that was the one which Mukund had told him about, but He was not in the crowd. Chandrakant knew that if he waited here the Royal Tiger would come to him, so he went on playing and feeling the flowers against his knees and bending his face to them. Suddenly a great shadow fell across the flowers and he knew with an intense thrill of delight and fear who it was and it made him smile with a painful sort of happiness. But he could not look up yet because he was not ready and there was something or someone missing and he knew if he looked before he was ready something terrible would happen. Then he woke up.

[To be continued]

CURRENTS OF EVENTS

Ronald Jorgensen

CONCLUSION

"Currents of Events" began appearing when the Portuguese revolution was set off with a coup d'état, unrolling consequences through Mozambique and Angola right up to the Rhodesian situation in today's newspapers. As an educational attempt, for both readers and writer, to touch events at the place where their direction and significance live, it has gradually commented on aspects of politics, economics, biology, finance, justice, ecology, invention, agriculture, women, business management, children, archaeology, arms sales, energy systems and other topics. in order to establish that the process toward unity is developing in all these poises on the planes of personal, community, national, world, biospheric and cosmic oneness.

With that perception more or less established, continuation of the column would only involve noting more instances of it, something that readers and the writer are likely to be already doing individually as a matter of course. Being the column's last issue, the question arises just what the actual currents of the past two years have carried us to that has opened possibilities of insight into present and coming events.

THE PRESENT SITUATION

Its Overside

This month is a particularly good time to examine this question, since the weeks have been so charged with what appear to be twists out of expectation, shifts of what was believed to be quakeless high-ground. First China comes to mind.

To have suggested even a few months ago that Chairman Mao Tse-tung would be in difficulty would have been inviting amused ridicule. What little we know of events there suggests his policy of continual revolution is calling up resistance in a people who want increased consumer comforts, individual work incentives amidst the commune system, an

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education where youth are free of the required Maoist countryside labor stint before entering university studies, and similar unradical impulses. From Hong Kong, H. Ellithorpe reports that:

For a nation wracked by Mao's radical visions of purist communism for more than a decade any prospects of relief must have a strong attraction. Indeed, observers feel it may be this very relaxation of revolutionary fervour which Mao now describes as "spontaneous capitalism springing up". [*Indian Express*, 5 April 1976]

Not so long before this, in December—although it seems very distant now—the same journalist wrote a prescient piece in the *Indian Express* (17 December 1975) which daringly claimed that "the most dangerous gamble of the Peking leadership is with its own people", who are on "a consistent underswell of desire for higher wages and more consumer goods".

These people don't sound like the descriptions attributed to them in the successful agricultural, medical, educational, moral, birth control, athletic and other revolutions which are among the most remarkable achievements of any nation in our time. They sound more in the direction of the Russian population whose similar cravings are bubbling up in low labor productivity and questionable workmanship (*Indian Express*, 22 December 1975); like the people of Mozambique, whose doctors, teachers, and lawyers mostly left the country in a triple chaos when their professions were nationalized (*Indian Express*, 23 February 1976); like the Peruvian peasants who responded to their country's comprehensive land reforms by developing symptoms of a peasant elite, refusing to share new wealth with co-workers and still wanting to "waste it all on movies and women and shows" as was complained by an activist manager of a farm cooperative twelve miles from Lima (*Indian Express*, 13 October 1975). One might even say they could well be in the early stages of the Swedish peoples' position, which we discussed last month, who have the goods, the wages and the services but feel lonely and empty.

If the Chinese woman at home—as Robert S. Elegant suggested in the *Los Angeles Times* (carried in the *Sunday Standard* on December 14, 1975)—is chiefly interested in a better life for her family and herself, that is not very different from the American woman at home—revolutionary rhetoric aside. But it's an incomparably more important issue for the Chinese, or any socialistic or communistic people, because their entire theoretical momentum is powered by the assertion that progressive politico-economic changes produce corresponding changes of consciousness, from individualistic to social consciousness. Certainly they have engineered vast changes in their political and economic environment.

The disappointment in the working out of this theory must be faced by Mao—even though he has again taken control since the historic April 5th demonstration—in what is expected to be a protracted struggle. Essentially the same dilemma is also faced in a more casual and obscure series of counterparts in the West. One example is a German psychological experiment at Giessen University where twelve persons were given the hypothetical assignment of gradually improving the village living conditions in a fictitious African setting. They

were provided with ample technology and data about the area, and three of the twelve were actually experts in this type of work. Throughout the experiment, as initial successes turned to setbacks, then worse, the twelve worked parallel to each other with almost no cooperation and coordination of effort—particularly noticeable were the three experts (*Indian Express*, 10 December 1975).

A few months earlier in the 15 October 1975 edition, the same "Science Diary" newspaper column described a game, invented by two Danish scientists, called "Guns and Butter", which requires three persons: a controller, and two players who are separated from each other like two nations. The controller, supplied with a large quantity of coins, distributes one to each player with every deal or turn; each player then must secretly decide to put it in his butter dish, where he retains it, or his guns dish. From the guns dish it goes back to the controller; but if a player wants to declare war at any point, he who has devoted the most coins to his guns dish wins the war and collects whatever coins have accumulated in his opponent's butter dish. When the controller calls the game, each player takes home the coins in his butter dish as his payoff. Despite the fact that the most beneficial thing both players could do would be to cooperate—each putting all coins in his butter dish and ending the game with grand payoffs—the scientists observed that eighty-two per cent of the coins were spent on guns, and that no one even thought of cooperating. Each had a tendency to overestimate the militancy of the other.

One last example, much homier. In a piece about the new cancer vaccine reported on December 9th in the *Indian Express*, Dr. David Baltimore of the Massachusetts Institute of Technology began discussing the also essential factor of diet. "The high fat content in the average western world diet" he said, contributes to cancer, heart disease and other deadly illnesses.

But he was pessimistic that people would change their eating or smoking habits "even if we here today could show them exactly what causes cancer of the breast, prostate, bladder, etc."

Yet they could if they underwent a change of attitude, a change of consciousness from that of living by immediate gratification. Just as the guns and butter players—from wealth by violence to that of trust; the African village experts to genuine collaboration; as, too, the Peruvian peasants; the Mozambique doctors, lawyers, and teachers to a vibration of offering their services to their country; as with the Russian people's workmanship; the Swedes exploring a wealth of national fraternity beyond statistical well-being; and, of course, the Chinese—already extraordinarily developed in many ways—conquering their adolescent enemy of consumerism which Western countries are being forced to do battle with as an adult threat of eco-catastrophe. However it is now being dramatically demonstrated in China that changes in consciousness are not the result of even as much as twenty-seven years of a government's "environmental" design; but rather, it may be, an inner source individually and collectively, the same source as that of unity: a necessity which the current widely-known political volcanoes—in southern Africa, the Middle East, Argentina, Great Britain and the

EEC, Albania, Thailand, and Japan—are destined to gradually encounter more and more directly and with a slowly increasing increment of inevitability.

Its Underside

But for every turbulence or clash in the headlines there is a more calm and integrating accomplishment on page five; the list of crucibles is paired with incidents like the first agreement in thirty years of negotiations between the USSR and the United States for mutual on-site inspection in a treaty to halt all nuclear weapons tests (*Sunday Standard*, 11 April 1976). The same issue of the *Sunday Standard* also reports that Algerian, Libyan and Nigerian heads of state met in a surprise one-day summit and agreed as quickly to support "self-determination for the West Sahara without foreign influence"—which is likely to initiate a benevolent solution of the several months' north African confrontation.

Some other items extend the outline:

A "world jury" of thirty international personalities has been formed, according to the 3rd of April *Indian Express*, to try mercenaries captured in Angola for war crimes. Invited by the Angolan government, the jury will sit in a public trial—an indication of considerable distance between the usual tight-room military tribunals after such wars and a just hearing, and also of moving toward a supranational process.

The non-aligned states, who met on 27 March (*Hindu*, 29 March 1976), are working toward their own news-flow system in order to help the "de-colonization of information" and to develop cooperation among themselves in the sharing of information and culture. With the non-aligned being a leading edge of the world's construction toward unity, their growth and integration reify that edge.

Although the questions revolving around EEC political parties, elections, and parliament are still unresolved, the community has drawn up detailed plans to distribute over a million tons of food to thirty-eight developing countries and six international organizations, according to the *Indian Express*, April 3rd. This follows the far-reaching Lome accord, linking forty-five developing countries with the EEC in aid and duty-free export to European shores. News commentators are pessimistic about EEC political union, but the *Indian Express*, 10 March 1976, reports the issuance of the first telephone directory of the European Economic Community, in English, French, Dutch, Italian and German. Perhaps when people are in the same phone system, with all the social and commercial confluence that brings, the conventional political process can only catch up with and put its imprint on the new reality.

Although they were exchanging charges, a recent meeting marked the first time in the history of the UN Security Council that the Palestine Liberation Organization and

the state of Israel were in a face-to-face session (*Indian Express*, 24 March 1976).

It is true these positive indications do not match the scale of the several-nation southern African and Lebanese situations of great delicacy, but that is exactly appropriate in the sense of the big conflicts' purpose of drawing up all the toxin of division into the clear where it can be fully eliminated, while the still tender and small shoots of the future bud in preparation. And during this transitional time, we see the advent of the regional personality.

THE REGIONAL ADVENT

Until member states yield full power to the UN for settlement of disputes, regional influences like the EEC look like they will graduate into this kind of work. They are the next aggregate beyond the nation-state and before a world union, and when more are formed with a solidity and potency like that of the EEC's, we will probably see them pressed into alert and regular service—an evolving ASEAN for Southeast Asia; the maturing Andean Pact for South America; the Organization of African Unity; a six-nation, still infant cohesion in the Balkans; a semitic configuration we may expect to draw in all the nations of the Middle East; and the Asian Clearing House, which nations of the subcontinent are cautiously involving themselves in. You may have already noticed that the EEC, in their foreign ministers' meeting, issued a policy statement on Rhodesia and South-West Africa, reported as long ago as 26 February in the *Hindu*. More recently the Nine made a proposal to end the cod war between Iceland and England. According to the March 15th *Newsweek*, the water would be considered as one big pond, with shares based on each country's past annual catch.

AND PLAYFUL CATALYSTS

It is simply the rich, old run between individual and group or society, one nation and a region or all nations, with the evolutionary intention of finding the fullness of each that neither could have had without the risk of the play.

In the Play of Art

The opening of a "museum of raw art" in France presents work by unknowns who—in prisons, on farms, in insane asylums—painted simply for their own private theater. *Newsweek* of 29 March 1976 conveys this statement by Jean Dubuffet, the French painter who amassed the 4,500 piece collection:

Impulses toward artistic creation, far from being the privilege of exceptional individuals, abound in everyone. But they are commonly stifled, altered, or counterfelted by concern with social conformity.

These paintings may be almost the first fresh things one has seen in years, and clear

are an aid to the museum's two goals: "To waken people to their own possibilities" and "to challenge all the mechanisms of normalcy in society." Also, the opening of such a museum is an early indication of one of the changes bound to help cure the brittle and solipsistic condition of contemporary painting --which virtually all of us have repeatedly encountered-- so that the voluptuous transcendental beauty of art can move again through the soul of humanity, this time as a call of the integral future in the midst of our fractionated diversity.

The individual pole is finding its way even in women's high fashion --a sure sign of its widespread social emergence--with Sonia Rykiel's achievement of what she calls the layered look: a few pieces of basic clothing a woman can compose or replace or add to in any way she wants, including using last year's articles in the ensemble. Miss Rykiel explains that:

I give women a range of basic options to compose the feeling they want. Why should a woman stand for dictation? Why should she stand for being told something is out of style? [*Newsweek*, 1 December 1975]

The other pole was consummately shown in a 1975 play, that still may be running in France, which one critic declared to be "the theatrical event of the century" --for it was written, rehearsed and produced in such complete collaboration that *Newsweek's* columns (31 March 1975) termed it "authorless, an extended exercise in controlled improvisation". In other ways, also, "The Golden Age" drew diverse strands together: attempting to show a valid historical report to the future of the way people lived around 1975, it incorporated Italian *commedia dell' arte*, Chinese opera and circus clown styles to illuminate the home, factory, street, countryside--accurately emphasizing, in its selection of scenes, that the golden age is the age of the *sudra* or proletarian. Not only in the sense of the labor class coming into its own wide arc of power but also in the meaning of *sudra*, of work in service to all, becoming the caste-mark of the times--for construction workers and engineers, farmers and bank officers, domestic servants and government ministers.

In the Play of Nations

The play between individual and group is very active on the state level: do states sometimes have a true right, a duty on occasion, to intervene in another's affairs? What are "domestic" affairs and what are not in the recent case of Ethiopia's secretly allowing herself hundreds of thousands of famine deaths (*Newsweek*, 23 February 1976) because she didn't want international help that would shine on her ineptitude? Such disasters requiring international assistance are declared to occur about once every three weeks by the UN's disaster relief office in Geneva; many of them, like Ethiopia's, are more or less government-hidden to protect national prestige (*Indian Express*, 2 February 1976). The intervention-or-no question can be asked about the USSR, Uganda, Chile, South Africa; on one or another issue, no nation is free of it.

Nor is any person: compulsory state family planning--having the number of children one wants (*India--Hindu*, 9 February 1976); women with child-bearing potential forcibly transferred by their factory employer from polluted working conditions that might damage a

fetus—the women declaring they have the right to decide between baby damage and job damage, and that some of them, anyway, plan to never bear children (U.S.—*Newsweek*, 15 December 1975).

After recognizing these intractabilities, where does one go? Leaving the issue of Communist and Western powers aside for the moment, let us try to think clearly. Should there be intervention in the “household” of Rhodesia now? Consider the Lebanese civil war in the same way: at what point does it become more than a hands-off situation? Where does one draw the line distinguishing national sovereignty and international responsibility in the England-Iceland cod war?

This question, by one level and form or another, is characterizing an astonishing number of major global, regional, national, local, and personal problems. As if the next progression toward unity must be won precisely by answering it. But the reverse seems to be true also, that the question cannot be answered in the circuitry of logical energy in a way that will satisfy more than one or two factions of all those involved; it requires a change of consciousness, a movement inward toward the periphery of unity deep in the experience of one’s being. In the shadowless landscape where all is one, the question answers itself for each situation, as naturally as inhalation. And now that we’ve come full circle from China’s change of consciousness to this change of consciousness, may we let the rest happen in silence.

12 April 1976

REVIEW

A Strategy for the Future: The Systems Approach to World Order, by *Ervin Laszlo* (with a preface by Richard A. Falk) New York: Braziller, 1974.

Laszlo's approach is highly original, optimistic and humane. Neither a doomsday book nor a vision of utopia, it does not limit itself to a diagnosis of the present ills of world society, nor to vague depictions of some desirable future state without regard for a means of achieving this state. Instead, Laszlo provides an amazingly detailed chain of strategic links between the present problématique and a normative model of the long-range future.

The systems approach, which is sketched in an appendix, is made to bear an embarrassingly heavy burden: general systems theory (GST) is not only expected to integrate parts of such diverse fields as political theory, geopolitics, psychology, sociology, ecology, etc. and thereby to provide the tools for thinking of the world-as-one (world order [WO] thinking), but also to propose humanistic norms for organizing future world society to reveal a plausible, nonviolent path from where we are to where we would like to be. The idea seems to be that unless GST (or some variant of it) serves these two dissimilar functions (a) of providing a conceptual framework for studying the entire socio-eco-etc. system and (b) of channelling human aspirations, there is little hope of escaping the destruction-bent course of the present system of GNP-maximizing sovereign states. The role of GST is particularly obscure in the attempt to establish humanistic norms: apart from a general principle of distributional equity, the norms for a humanistic WO enjoin the creation of institutional contexts which might facilitate worldwide satisfaction of legitimate needs. Laszlo's proposed list of legitimate needs is essentially the same as Maslow's need hierarchy. (The overall goal of a humanistic, multivariable steady state, together with the principle of distributional equity, entails a normative, selective anti-growth attitude e.g. insofar as unbridled economic growth, at least in first world countries, is seen, as a matter of empirical fact, to threaten the general realizability of the need-hierarchy, economic growth [in first world countries] is bad, i.e. antihumanistic.)

To make the transition to a mature, self-regulating world system (WS), the disparity in development between the functionally global material technologies and the societal technologies must be reduced by improving the latter, i.e. what is needed is the "globalization of the decision-making organization and control processes which are currently

vested in national governments" (page 35). This "globalization" requires a conceptualization of the WS which does not treat nation-states as ultimate sovereign functional units. However, the request for a globalization of decision-making and control is not to be confused with a request for a W-government or W-authority: since global diversity is high indeed, anything remotely resembling a present government would lack the requisite variety and could only, at best, control by coercion. "The question is, then, what kind of a political system can be responsive to current global trends without exercising arbitrary coercion in carrying out its mandate?" And the answer: a "central guidance system" which would "govern in the functional sense of steering processes away from inherently dangerous paths rather than in the traditional sense of exercising power and authority for the sake of their self-perpetuation" (pp. 58-9). Such a central guidance system would presumably allow for a great deal of diversity in political structures, cultural institutions, etc. at the nation-level and below while guaranteeing just enough stability at the planetary level as is needed to ensure survival for an indefinite length of time.

However, implementation of a regulatory guidance system requires international populist support. Politicians, whether from the left, right or elsewhere, are locked into patterns of growth-thinking and will be the last to see the systemic point. Or, as Beer might put it, the principles of guidance systems are simply inexpressible in the politician's language of national competition, gross national product (GNP), cold war, etc. Such "grass roots" support requires a radical change in value systems. Unfortunately, Laszlo says precious little about the factors which induce value changes, but he seems to hold that current values are subject to decline and new ones can be put in their place by exposing belief-cum-value systems to rational argument, especially in the form of extensive information feedback.

The proposed path to a humane guidance system consists of three eras or phases.

Phase I has the task of raising "W-system consciousness" (p. 89) by showing the inadequacy of current approaches to political and economic decision making and the parochialism of value-systems and national goals. Discussions, lectures, advertising, new forms of literature etc. are expected to bring about widespread insight into the interdependence of human societies and the interdependence of mankind and nature. It is the major objective of Phase I to prepare the ground for political changes and to make public opinion favorable to WO-thinking. The outputs—after circa ten years of Phase I—will be strong demands for (a) unrestricted information flow concerning global matters, (b) international cooperation and (c) immediate citizen participation in shaping foreign policy.

Phase II, the era of the "ecofeedback information-decision flow" (p. 111) has the task of creating a "multilevel response mechanism" (p. 123) to transform the mobilized W-consciousness into political action. The fact that WO-issues received greater coverage during Phase I is insufficient in itself to guarantee the requisite switch in basic ways of

thinking about the world. To achieve the Phase II objective of translating belief-and-value changes into decision making, the outputs of Phase I (i.e. the generally more global outlook and the insight that secrecy compounds problems) must be extended and consolidated. This consolidation is to be accomplished by an ecofeedback system in the form of a widely played World Simulation Game. The game is dead serious, i.e. it has payoffs in the real world: continuous information concerning the effects of previous actions on the difference between actual and desirable trends entices people to attempt to change the actual course of affairs. The desirable conditions are spelled out in a continuously updated *normative W-model*. This normative model specifies a set of arrangements of global resources (such as space, food, energy, communication, etc.), each component of which is optimal in the sense of providing transculturally acceptable necessary conditions for the equitable satisfaction of legitimate needs (for an indefinite length of time). The multilevel response mechanism (see below) presupposes that both descriptive and normative W-models are formulated at a much finer resolution level than is achieved by the most sophisticated contemporary effort, i. e. the descriptive W-model evolved by the Mesarovic-Pestel team: the lowest level of subdivision would consist of neighbourhoods of at most 2000 citizens!

With these two kinds of models at hand different subsystem-norms can be formulated in terms of subsystem contributions to optimum states and actual trend projections can be compared with desirable developmental paths. Thus, the ecofeedback information flow is a series of error messages about the gaps between output and input reference values at the various levels.

The ecofeedback information flow, by strengthening the perceived need for change, gives rise (hopefully) to the institutionalization of participatory decision making. This decision making body, the *multilevel response mechanism*, is a hierarchical arrangement of electronically supported town-hall meetings (p. 130). (The various hierarchical levels correspond to subsystem levels.) At each level information extracted from model comparisons is discussed and eventually a decision is made which representatives bring to the attention of the next higher subsystem (p. 130). It is of course possible that conflicts which are visible only at higher levels entrain compromises and constrain lower level resolutions. Laszlo says nothing about how stalemates could be avoided. It is also far from clear how power is allocated. For example, I was unable to determine from the text whether lowest level decisions are merely proposals submitted for consideration or whether the W-Simulation Games are played seriously, with real decision making power. The basic assumption seems to be that the higher levels exercise control by coordinating the lower level resolutions without pursuing (other) goals of their own. The outputs of Phase II are a functioning ecofeedback system, world data banks scattered around the globe like weather stations and a popular gut conviction that the feasible solutions to the (by then more massive) crises will have to be supranational. According to a plausible scenario all of this could be achieved by the end of the millenium.

Phase III, the era of the World Homeostat System (WHS) has the objective of expanding the ecofeedback system and of adding power to it. It is the "era of institutionalized global self-regulation" (p. 143). "The world of phase three will not be a consciously planned world, but at best one that is consciously stabilized . . ." (p. 144). The WHS is a consciously designed, institutional control mechanism which renders the WHS self-regulatory. Its task is to keep WS processes within preferred limits. The WHS is the world's central nervous system. Like any control system it has two types of flows, matter-energy-flows: receptor to accumulator to effector, and information flows: sensor to correlator to effector. Accumulator and correlator are connected by a brainlike regulator. These general functional tasks are performed by the following institutions: the receptor, or *World Revenue Service*, progressively taxes nations, corporations, and affluent individuals according to their resources or their effects on the environment. The accumulator, or *World Treasury*, allocates resources according to instructions from decision making units. The sensor, or *World Information Service*, is a global data network with specialized monitors for the main functional areas of security, ecology, population, economy. This fourfold flow is integrated by a coordinating board into a "Trends of the World Report". This report is made available to all decision making units. The correlator, or *Council of Principals*, is the major administrative unit. It compares the outputs of the World Information Service and the regulator and, aided by feasibility reports from associated Implementation Research Boards, issues commands to the effectors. The effector, or *World Executive Service*, consists of the Implementing Board which matches funds to functions, and of a number of operative agencies for the four functional areas. It includes a World Rescue Organization and various courts for handling complaints. The regulator, or *Optimum-State Steering Committee*, is the major decision making unit. Its decisions concern global matters and are intended to correct for deviations from system norms while only minimally interfering with local or national arrangements. Although the regulator has the power to take deviation reducing actions by issuing orders to the executive agents, it lacks the power to implement any particular vision of the good life. The regulator decides to reduce discrepancies between two sets of maps of various resolution levels, the actual state and the optimal state maps. The output of Phase III, itself transitory, is a global functional actor with legal endorsement and power to interfere with those actions of nation states which decrease the probability of a universal attainment of happiness prerequisites. And these prerequisites determine a quasi-stationary optimum state which constitutes an evolving, approximable yet unattainable ideal.

Laszlo says enough to make the operation of the WHS seem feasible. I also find the notion of a corrective guidance system much more attractive than that of a coercive W-government. But how does it all get off the ground? Phase I may be easy going, but even an expanded consciousness does not translate readily into political action. And even though Laszlo cautions us against expecting a full-fledged blueprint, some transitions between and within phases deserve a less cavalier treatment than his. For example, the problems of turning the simulation games serious i.e. political, and of overcoming governmental secrecy seem every bit as tough as those of implementing the WHS.

All major technological innovations (e.g. agriculture, navigation, printing, etc.) brought with them the opportunity and the need for larger and larger groups to cooperate. The presently possible and necessary level of cooperation is that of humankind. Practical people—whom Bertrand Russell defined as those who have no idea what to do in practice—will no doubt find *A Strategy for the Future* hopelessly utopian. But this highly recommendable book is quite realistic where it counts: it addresses itself to the real parameters of the global problématique.

Franz Oppacher

Franz Oppacher is a professor in the Department of Philosophy at Concordia University, Montreal. His primary scholarly interests are the philosophy of science and systems theory. Professor Oppacher is also presently engaged in research sponsored by the Canadian government on the topic of "conservation societies" in which he is attempting to explicate the concept of the quality of life.

FOCUS

DECISIONS OF THE FIRST CENTRAL COUNCIL MEETING OF THE WORLD UNION INDIA CENTRE

The integration of India must be achieved for the greatness of her future and for the fulfilment of her destined role to help world integration.

The first meeting of the central council of the World Union India Centre was held at Pondicherry on the evening of 21 February 1976 and continued on the morning of the 22nd. After a brief meditation, Prof. N. S. Govinda Rao, the president, welcomed the members and observers present, declaring that the central council held its inaugural meeting on the auspicious evening of the Mother's birthday: an assurance that her blessings and guidance would centre the deliberations of the council. He observed that the India Centre is not a pyramidal organ exercising hegemony over other centres in India, but will function as a coordinating body, establishing liaison between all centres and members and itself. The immediate object of the India Centre is to work for the national integration of India, an object of great importance which may be achieved by spiritual, socio-economic and material means. In social activities, it will be necessary to remove the bonds of caste distinctions and eradicate blind beliefs and superstitions. In the field of education a continuous process of learning, and unlearning, from the level of kindergarten to post-graduate study is imperative. Dance, drama, painting, music, and films in the cultural field, and, too, the lucid use of all communication media would facilitate the rapid process of true integration. Trade and commerce are other avenues to be explored. Physical activity for the preservation of health, a prerequisite for a healthy mind, is essential for the development of the spiritual force needed for conscious integration of the individual, group, and nation. Professor Rao concluded by saying that spiritual activities will be mainly directed towards building oneness in consciousness through meditation, discourses, discussions and the like. He then invited suggestions from the meeting.

Sri Rohit Mehta stressed the importance of national integration which, according to him, is neither a compromise, juxtaposition, nor a synthesis; it is a state where diversities remain without creating divisions, a state which may be achieved only by a spiritual approach—that of the Vedas, Bhagavad Gita and Upanishads. He added that Sri Aurobindo's *Foundations of*

Indian Culture is all-comprehensive and should be taught in all schools and colleges. As language is the most powerful medium for integration, a common language, or to start with a common script for all Indian languages, should be taught. Perhaps Devanagiri or Roman script would be ideal. We must hold exhibitions throughout India around the theme, "Discover India": we must know the diversity that is hers, and her unity which pervades the diversity.

Dr. Sitaram Jayaswal informed the meeting that almost all state governments have departments of national integration and advised the establishment of our liaison with them. This would eventually lead to a working relationship.

Col. P. N. Luthra said national integration is a state of mind, a positive feeling. One practical way to achieve it is by developing youth centres for international living. To begin with, every World Union centre may entertain a student sent from a centre in another part of the country for some time; it will be his living exposure to the diversity of India's culture, and he will begin to feel something of what India is. He should, of course, live in a host family so that he gets the proper and true experience. In this he will have the possibility of owning the vision that he belongs, not only to his native area, but to Mother India.

Dr. N. R. Madhava Menon felt the India Centre should concentrate on arresting the negative factors preventing national integration. These are perniciously evident in the sentiment of "the sons of the soil" being applied in employment and educational policies. Prof. Ambady Narayan spoke about the great importance of cultural integration.

Sri M. P. Pandit noted that we should know our limitations. It is pointedly necessary for us to individually get into contact with men of power in various national sectors and mentally commit them to act for national integration in both government and public life. This should be the first step. Sri Pandit narrated the experiences of internationalising life in the Ashram and Auroville, where there are sixteen and thirty-plus nations represented respectively. Until we are first integrated in ourselves, the atavistic tendencies of national, tribal and district groupings come to the fore. To help break these tendencies, those in the interstate living projects, for example, must not stay in their own local group's cluster. Each cluster must be dispersed among all the others.

Sri N. S. Rao extended the point by saying it would be a great thing if, on the level of the centre itself, subgroups of people would open up more of a flow of contact between themselves. When it starts in the centre, it can expand to other centres, then to world union with the country.

Ronald Jorgensen urged an emphasis on the expression of the group soul in art, music, and drama of various districts, states, and of the national soul, which will have a greater

impact than mere economic, political, and cultural factors. Involvement in this effort is very important.

Prof. N. S. Govinda Rao stressed the importance of respect for diversity and the need to foster the feeling of fraternity. He thanked the members for their constructive suggestions and added that he proposed to start this work by (1) corresponding individually with all members of World Union; (2) building a liaison with associations that have similar objectives; (3) collaborating in the work with sister movements having similar objects; and (4) cooperating with governmental and public institutions and grant agencies for their assistance in this work.

The council resolved that the constitution of the India Centre be printed in "Focus".

The invitation to hold the next convention of the World Union centres of India at Calcutta was offered by Sri Samar Basu and accepted with acclaim; it was therefore decided to convene the second national convention there during 1978, with the date yet to be decided.

Sri Samar Basu was elected as a vice-president of the central council, and Col. P. N. Luthra, Dr. N. R. Madhava Menon, Sri Rohit Mehta, and Dr. H. S. Lakshminarayana were elected as members. The president of World Union India Centre was authorised to fill the vacancies in the council in consultation with the general secretary. The present membership of the central council is:

Name	Designation	Residence
Prof. N. S. Govinda Rao	President	Bangalore
Sri Samar Basu	Vice-president	Uttarpara
Sri N. S. Rao	Vice-president	Bombay
Dr. H. S. Lakshminarayana	Secretary	Bangalore
Dr. T. Prasannasimha Row	Secretary	Bangalore
Sri K. S. Chakravarthy	Treasurer	Bangalore
Sri P. V. Rajagopal	Member ex officio	Bangalore
Col. P. N. Luthra	Member	New Delhi
Dr. N. R. Madhava Menon	Member	Pondicherry
Sri Rohit Mehta	Member	Varanasi
Sri Ambapremi D. Shah	Member	Baroda
Sri R. N. Amin	Member	Ahmedabad
Sri Haneef Jawaid	Member	Bangalore
Sri H. S. Narayana Setty	Member	Bangalore
Sri M. P. Pandit	Member ex officio	Pondicherry
Sri A. B. Patel	Member ex officio	Pondicherry

Memorandum of Association and Rules and Regulations of WORLD UNION INDIA CENTRE

1 Name: The society shall be called "World Union India Centre".

2. Extent of activities:

a. World Union India Centre shall work as a unit of World Union International Centre, Pondicherry 605002, India.

b. Its activities shall extend to the geographical boundaries of the Indian Union.

3. Headquarters: The headquarters of the India Centre shall be at Bangalore but may be shifted to another place by a resolution passed by a general meeting of the centre and approved by the International Centre.

4. Objects: The objects for which the society is established shall be in fulfilment of the objects of the International Centre. These are:

a. To foster in all men the consciousness of the oneness of all life and the essential unity of all mankind.

b. By personal example through social communication and by means of other activities to awaken and strengthen the sense of oneness and unity in the faith that it will become increasingly the basic consciousness for all mankind.

c. To promote an awareness of the forces of division, hatred, jealousy, gossip, egoistic effort and struggle and their effect in disrupting peace and harmony at individual, national and international levels.

d. To encourage all efforts made to seek the truth which is always the same though ever unfolding new vistas of experiences which reshape all our activities and thinking at individual and social levels to make us increasingly fit to realise our oneness with all that is the truth.

e. To foster respect for all life and the practice of understanding, tolerance, active good-will towards all, from family to society, to the nation and the world.

f. To encourage the understanding that human unity can be achieved only through a simultaneous growth of physical and spiritual well-being.

g. To promote at the national level the emergence of a new world order where man can live in perfect peace and harmony with himself, his family, his country and the world.

h. To organise projects of life and work in India for the progressive realisation of these objects, particularly national wholeness.

i. To establish institutions and organisations to carry out the above objects.

j. To promote publication and distribution of supporting literature.

k. To establish or encourage establishment of libraries with books and journals devoted to or dealing primarily with human unity.

l. To organise seminars, conferences or other gatherings in the service of these objects.

m. To train workers for the service and furtherance of the above objects.

n. To cooperate with other individuals, societies and organisations working with

similar aims.

o. To purchase or to sell, to take on lease or in exchange, hire or otherwise acquire moveable or immovable property for the furtherance of the above objectives.

p. To raise funds for these purposes.

q. To invest surplus funds in securities, properties or in other ways as may be deemed fit from time to time.

r. To secure and manage endowments for the promotion of the above objects.

s. To do and perform all other acts, matters and things that may assist in, be conducive to or necessary for, the fulfilment of the above mentioned objects.

5. *Members:* The India Centre shall consist of members mentioned in subclause "a" hereof and honorary life members as per subclause "b".

a. Any person who is moved by the ideals of establishing a new world order based on oneness, peace and harmony as embodied in the objects and the rules governing the constitution of the International Centre will be eligible for membership.

b. The number of honorary life members shall be limited to ten at present, who shall be persons eminent for their knowledge of or contributions to the objectives of World Union. Persons of all nations shall be eligible to become honorary life members.

6. *Administration:* The administration, direction and management of the affairs of World Union India Centre shall be vested in a central council to be constituted of:

a. a national president

b. two national vice-presidents

c. two national secretaries

d. a national treasurer

e. national members—one from each of the state centres recognised by the International Centre

f. one vice-president and members not exceeding ten to be nominated by the International Centre

g. one vice-president and members not exceeding five to be nominated by the national president

h. past president of the India Centre

i. chairman, vice-chairmen, secretary general and other office bearers of the International Centre ex officio

j. honorary life members ex officio

k. members co-opted by the national president for any particular meeting

7. *Election* of the office bearers and members of the central council:

a. The first central council shall consist of a president, vice-presidents, other office bearers, and members nominated by the International Centre. After the nomination of the members of the central council, the national president shall exercise his choice to nominate persons under item "g" of clause 6.

b. The term of each central council shall be for a period of three years commencing from the date of the first meeting of the central council.

c. The retiring central council shall cease to function from the date the new council holds its first meeting.

d. The retiring central council will elect from amongst its members the national president for the succeeding central council. The International Centre will nominate one vice-president and members not exceeding ten for the succeeding central council as per item "f" of clause 6.

The newly elected national president will nominate one vice-president and members not exceeding five for the succeeding central council as per item "g" of clause 6. The newly elected national president, two national vice-presidents and the past national president of the India Centre, the chairman, the vice-chairmen, the general secretary and other office bearers of the International Centre and honorary life members shall form the nucleus of the succeeding central council and shall be entitled to exercise and discharge all functions of the central council and exercise all powers thereof as provided herein, until the composition of the succeeding central council is completed in accordance with the provisions of this constitution.

e. The newly elected national president will nominate one or both national secretaries and the national treasurer from amongst the members of the new central council.

f. All nominated members irrespective of when they were nominated will retire along with the other members of the central council at the expiry of its term.

g. If the International Centre considers the work of the central council unsatisfactory, it may take over the management of the central council itself or reconstitute a new central council in accordance with the provisions of subclause "a" hereof.

8. *Central council:* The central council shall have the power to frame bylaws which it considers are conducive to the good administration of the India Centre and the realisation of the objects of World Union.

9. *Quorum:* The quorum for a meeting of the central council shall be five.

10. *National president.*

1. The powers and duties of the national president shall include:

a. To preside at all meetings of the central council and to regulate its proceedings.

b. To ensure that due effect is given to the rules and regulations and bylaws of the centre, to implement resolutions passed by the central council and the directives of the International Centre.

c. To be ex officio member of all committees appointed by the central council.

d. To be the chief executive of the central council with power to allocate work amongst all office bearers and others of the India Centre.

11. In case of doubt as to the interpretation of any of these rules and regulations, he shall decide on the interpretation and his decision shall be final. Where no rule or regulation

exists for determining any question or matter which may arise at any meeting or otherwise and the central council is not able to decide the procedure to be followed, the president shall give his ruling which shall be final.

11. Vice-presidents: The seniormost vice-president (seniority being counted from the date he became a member of World Union) will officiate for the president in the latter's absence during central council meetings. Each vice-president shall perform such duties on behalf of the president as may be assigned to him by the president.

12. Secretaries: The duties of the secretaries shall be as follows:

a. To work generally under the guidance of the president. They will assist the president in carrying out the objectives of the India Centre.

b. To conduct all correspondence of the India Centre and of the central council and to sign letters, papers and legal documents issuing from the office of the India Centre. They, however, shall not sign letters which the president may wish to sign himself or request any other to sign on his behalf.

c. To do the work as allocated between them by the national president.

d. To supervise the work of deputy or assistant secretaries or other personnel appointed, on the advice of the central council, by the national president.

13. Treasurer: The treasurer shall receive and hold for the use of the India Centre all money paid to it. He shall disburse all sums due from it and shall keep accounts of all such receipts and payments.

14. General meetings of the India Centre: General meetings shall be of two types:

I. Ordinary general meetings which shall be held periodically and at least once in three years.

II. Extraordinary general meetings.

The following rules shall be applicable to all general meetings:

a. Twenty-five members shall constitute a quorum.

b. The president for the meeting shall be the national president. In his absence the seniormost member shall take the chair.

c. The usual method of voting shall be by show of hands unless the president of the meeting decides otherwise.

d. The central council shall prepare and submit a report on the activities of the India Centre since the last meeting.

e. Extraordinary general meetings may be convened on a requisition signed by not less than twenty members of the central council or not less than ten percent of the total number of members of World Union. The requisitioners shall state the special business for which it is desirable that such an extraordinary general meeting should be convened. No business not mentioned in the notice of requisition shall be transacted at such an extraordinary general meeting. Notice of such an extraordinary general meeting shall be published in

World Union journal reasonably in advance of its date.

f. The central council may adopt any resolution by correspondence.

15. Seal:

a. World Union India Centre shall have a permanent seal of a design approved by the central council.

b. The seal shall be affixed on all formal documents in the presence of any two office bearers.

16. General: The India Centre will work under the advice of the International Centre. In the event of the India Centre ceasing to exist for any reason whatsoever, the central council or a representative of the International Centre shall terminate all its affairs and hand over any surplus assets and properties to the International Centre.

ORGANISATIONAL ACTIVITY

World Union Centres

Bangalore The major concern of the monthly meeting on 4 April was the paper, "An Educational Policy and Programme", read by Rohit Mehta on 21 February 1976 at the Pondicherry executive committee meeting. (This paper has since been published as a draft in the April "Focus" for readers' comments and suggestions that will eventuate in a final version of World Union's educational position.) In an extensive and frank discussion of what members felt represented a fundamental shift of the entire pattern of Indian education in the paper, it was agreed that a more detailed and thorough study would be needed before the Bangalore Centre could offer suggestions. Two members were asked to initiate discussion in the next monthly meeting, when assessments will be expected to crystallise.

New officers for the year 1976-77 were elected in the centre's general body meeting on 7 March 1976. They are Sri P. V. Rajagoopal, president; Sri B. C. S. Narayan and Dr. T. Prasannasimha Rao, vice-presidents; Sri H. S. Narayana Setty and Dr. H. S. Lakshminarayana, secretaries; and Sri H. K. Shantaveerappa, treasurer.

Chakradharpur A *sisu chakra*, or children's circle, was jointly organised with members of Sri Aurobindo Society. A parade, freehand exercises, songs, speeches and readings, meditation, and group discussion composed the programme held at the premises of Sri Aurobindo Society.

Chandernagore Homage was given to Sri Brujagopal Sinha Roy, who died on 2 November 1975. Sri Ashim Dutta will be acting as secretary during a three months leave of the regular officer, Sri B. N. Baral.

Eastern Region An enormous educational effort is being made through the recently formed Sri Aurobindo Siksha Samsad in Calcutta in implementing Sri Aurobindo's approach

to education throughout West Bengal. In the exchanges of views and educative contacts being made at conferences, in press conferences, and with officials of the state's educational system, a three phase programme is being developed. First, it is intended to wholly implement integral education in selected schools of the West Bengal system which, if results are good, may become the models for remaining schools in the state. This plan was the result of a very productive meeting by the Samsad committee with Sri S. M. Chatterjee, president of the West Bengal Board of Secondary Education. Second, to introduce whatever aspects of integral education which can be accepted and used in the present school system. Third, to initiate integral education as a subject of study in institutions of higher education, particularly the curricula of teachers' colleges. It is to these last two ends that the Samsad has planned a teachers' conference on 13 April 1976 in Calcutta.

One of the many laudably practical efforts made by the Samsad is the threefold guidance they offer to teachers, students, and parents of any school selected by them which is willing to centre itself around this approach to education—an approach which emphasises reaching the full term of one's true physical, vital, mental, psychic, and spiritual parts, directed toward the free, full development of the individual, nation and world. Three schools are candidates for this selection.

Konnagar Swami Dhyananda Ashram was the venue for their monthly meeting on 27 March, which was attended by a growing number of participants. The relevance of the teaching given by Sri Ramakrishna to the World Union movement was the theme spoken on by Sri Samar Basu, coordinator of the Eastern Region.

North Calcutta North Calcutta Centre held their twenty-fourth monthly meeting in a manner for them normal: a wide cadence of programmatic expression. Members' new paintings and poems, children's offerings of readings, songs, and, new this month, a recitation of some writings of Sri Aurobindo and the Mother which had been translated into Bengali by Sujit Kumar Palit—these characterised the programme.

As he was describing World Union as a movement for exploration in perpetually higher consciousness, Sri T. K. Sinha announced the necessity of conducting a convention of writers and artists, as they are potentially valuable instruments for this work. Those living relatively close to the city might like to know the North Calcutta Centre is preparing for its second cultural workshop in May 1976. The first one, in January, was described in the April "Focus".

Tamilnadu After two opening talks on the Bhagavad Gita by president Smt. Madhuben K. Shah and by Sri Keshavlal Tarwadi, the director of research in Tamilology at Madras' Presidency College read an interesting paper. Dr. M. Sundaram's paper was centred in Sangam literature's and Tamil culture's fundamental vision of religions, men, and the world being one. The Tamil verse is:

Every country is my country.
Every man is my kinsman.

A Barathanatyam recital of Krishna's life was given by Kumari Rajasree after tea.


New Centres

Udyan-Kalyan The village of Tilutia in the district of Birbhan of West Bengal is a place where three jurisdictions meet; therefore it was selected as the locale of Udyan-Kalyan Centre. Of the two residents who initiated the inaugural meeting on 18 March 1976, Sri Samarendra's first contact with World Union was his attendance at the second international conference in 1967-- rooting the success of the present effort nearly ten years ago.

Persons from different villages—Bolepur, Nanoor and Labhpur—attended, and when a letter from Sri Purnendu' Prasad Bhattacharya was read to them, six persons submitted their annual subscription and others promised to do so. Their report states that meetings will be held on the third Sunday of each English calendar month.

New Life Members

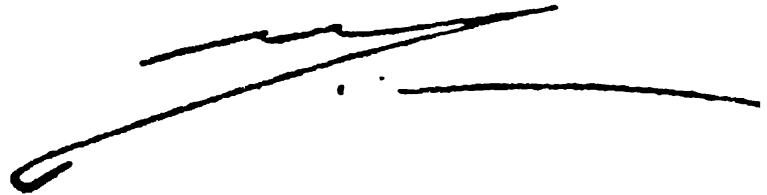
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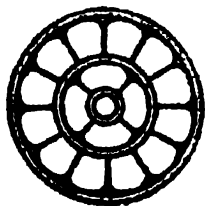
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--Sri Aurobindo



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The spread of the idea is not sufficient,
we must have real yogins.

—Sri Aurobindo

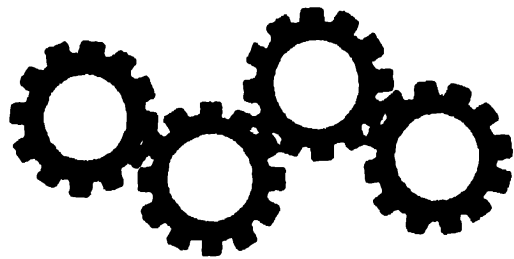
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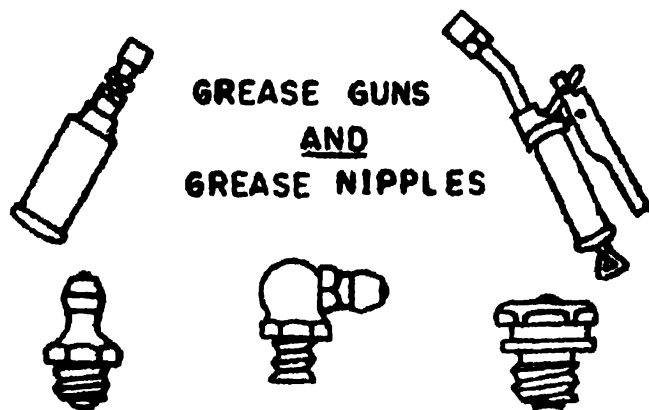
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EDITORIAL

The Next Avatar

It is a very relevant point that William Irwin Thompson raises in his absorbing book, *Passages About Earth*, concerning the institution of gurus, prophets, and messiahs in the coming future. Their age is over. The general level of human consciousness has evolved to such an extent that it is now futile to expect humanity or sections of humanity to prostrate before any one person, however eminent. The stress of the Time-Spirit today is not on the discovery of a super-Guru or an Avatar, but on the development of a number of men whose consciousness is growing and who can collectively help mankind rise to a higher and brighter future. Even in the spiritual sphere it is the age of Everyman. Hereafter, the gulf between the highest developed man and his second cannot be as wide as hitherto.

Today the trend is towards the formation of small collectivities—based on mutual regard and trust—working toward new patterns of living, with a universal consciousness as the immediate objective. Determined efforts are being made to transcend the outmoded competitive style of living centred round ego-interests. Such experiments may have the colour of this religion or philosophy or that, depending upon their cultural background, but there is a recognition that the consciousness that is aimed at rises above these labels.

So also regarding the next Avatar or Incarnation, the Second Coming. Such a manifestation of the Divine Spirit will not be in the form of any one individual. The efflorescence is more likely to be in terms of a new consciousness that will assume the leadership of evolving humanity. Whoever qualifies to embody it will do so, in the measure of his capacities. There will be a collective Avatar.

Family-Planning Programmes in India

The concept of family planning in India may be said to have started with Mrs. Margaret Sangers whose approach came to be dourly opposed by Mahatma Gandhi. Gandhiji advocated self-control in preference to artificial birth-control. But it was a counsel of perfection considering the nature of the human elements involved.

At that time—now nearly forty years ago—the question remained an academic one, since the population problem in the country was not then acute. But with the rapid rise in numbers within a decade or two, the question became more serious and attention was forcibly drawn to the impending danger of a population explosion unless comprehensive measures were adopted to check the number of births. The government launched a propaganda drive to educate the public on the necessity of family planning and offered monetary inducements to those who accepted medical help to avoid or stop pregnancies. That this led to an unbelievable spread of corruption is another matter. The results of this drive were not encouraging. Some sections professed to be helpless to practice family planning because of the injunctions of their religion which barred resorting to these measures for limiting progeny. Certain religious establishments promoted this belief. And there was not effective education of the masses, especially in disabusing them of many misunderstandings that had proliferated regarding the physical effects of steps like vasectomy, tubectomy, etc. There was a pronounced reluctance on the part of most to submit themselves to medical care as provided by the authorities. The net result was virtually a total failure of the family-planning movement and an alarming increase in the country's population. Presently, some are talking of sterilisation—compulsory in certain states—after three children. The central government has wisely counselled caution and has called for more sustained publicity and education.

The problem seems actually to be largely confined to the poorer classes who have children indiscriminately. The middle classes are obliged by circumstance to keep their families within manageable limits. Whatever their religious persuasion, by and large, they are careful to adopt measures which are convenient to them. The richer classes do not pose a major problem in this regard since their way of life is such that their families are in fact dwindling in size. It is then, amongst the poorer sections—who form the bulk of Indian society—that intense work must be done through visual publicity and the offering of incentives in kind, with the threat of penal action as the extreme resort.

The problem of population control in a country like India, where there is still a double standard of conduct towards men and women, is unique. Men have no hesitation in pushing the women into family-planning clinics, but they themselves seek to avoid taking the obvious necessary steps. This is a matter that must be kept in mind in framing new legislation to correct social inequalities.

There has been a very sensible suggestion made to call a meeting of the heads of the various religious communities to face this question boldly. They would make it finally and authoritatively clear that no religion does or can prohibit the regulation of progeny in keeping with the natural resources available to

the society. The Roman Catholic Church may object to the use of contraceptive means, but it does not object to a natural restraint in the matter. As regards Islam and its widely publicised freedom for each man to have four wives and multiply abundantly, it is not an injunction but an allowance that was made within the context of the undeveloped conditions that prevailed in the desert countries where the religion took birth. There are many provisions and requirements of this type in every religion, but all of them are not applied literally for eternity. In every scripture there are elements that are of a purely local and temporal character, and there are parts that are of perennial import. Wisdom demands that we exercise our discrimination, and base our belief and practice only on the eternal and fundamental truths that form the bedrock of a teaching. The authorities as well as public opinion must exert influence in this matter to encourage religious leaders to join in the crusade against diehard ignorance and reaction.

"Religious" Bodies

The recent disclosures following police raids on the headquarters of the Meivazhi Anantar movement in the Trichy district of Tamilnadu only go to confirm the popular apprehension that unsocial elements use the cover of religion and spirituality for their nefarious ends. The history of the Ananda Marg in the north and the exposure of their underhanded activities is too recent to be forgotten. The public have as much responsibility as governmental agencies to keep a watchful eye on the mushroom growth of similar bodies in the country. No doubt the problem is not peculiar to India, but the extent of credulity is more here than perhaps anywhere else.

Not Cricket

The captain of the West Indies cricket team certainly did not bring glory to himself when he eulogised the superiority of his team over the Indian side at the conclusion of the last test match. It was not cricket that was played at all. From the first over of the bumpers it was clear that they wanted to intimidate the Indian batsmen, and there was no respite even when there were injuries one after another. They wanted only to win somehow and they got what they wanted. But that is not why these games are played; they are played to develop skill, sportsmanship, camaraderie. The clock swings back to the days of Larwood!

M. P. P.

FROM STOCKHOLM TO ETERNITY

Clayton E. Jensen

Global Ecology

It is time to pause and to ponder about the direction of global ecology. First, however, global ecology must be defined, and then inquiries can be addressed—such as where have we been, where are we, and finally where are we going.

Broadly speaking, global ecology is concerned with the interactive impacts of man upon his environment and the environment upon man. Within this broad context, there are two distinct dimensions to global ecology. One, there are concerns involving global commons, such as the ambient atmosphere, the open oceans, solar energy, and certain wildlife and mammal species. There are also concerns about very local environmental problems, such as the purity of community water supplies, indigenous health hazards, agricultural productivity, and human settlements, where these concerns are also common in the sense that they are shared by communities worldwide, all of whom could benefit through the international exchange of information, knowledge, and technology. Thus, global ecology is the study of the human environment in delicate balance between the availability of air, water, land, and food of high quality and the health and well-being of living things.

Beginning in Stockholm

The United Nations Conference on the Human Environment held in Stockholm, Sweden, in June 1972 marks the beginning of an organized international focus upon global ecology. The glowing rhetoric of that prestigious conference uttered by heads of state and other high

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officials from 113 nations still echoes around the world. A plan of action emerged from this conference dedicated to the preservation and enhancement of the human environment. The highlights of the action proposals, since implemented, include a United Nations Environment Program (UNEP) headed by an executive director; a voluntary fund of 100 million dollars over 5 years; a UNEP Governing Council of 58 nations; and a United Nations inter-agency coordination board for UNEP.

The framework for the Stockholm plan of action is composed of three major parts: environmental assessment, environmental management, and supporting measures. The designation of Earthwatch was adopted for the global environmental assessment program that would provide the basis for responsible environmental management. Earthwatch is designed to contain activities involving monitoring, research, evaluation, and information exchange.

Thus, the stage was set at Stockholm for concerted world action to solve environmental problems of concern to both developed and developing nations. In the fall of 1972 the United Nations General Assembly endorsed the establishment of UNEP and its action plan and agreed to locate the UNEP secretariat in Nairobi, Kenya. Maurice Strong (Canada), secretary general of the Stockholm conference, was named the first executive director of UNEP. Since January 1976, Mostafa Tolba (Egypt) has been the executive director.

There have been four meetings (June 1973 in Geneva, and March 1974, April 1975, and April 1976 in Nairobi) of the UNEP governing council with intervening intergovernmental meetings on various topics including one on monitoring in Nairobi during February 1974. This latter meeting took great strides toward the design and implementation of the Global Environmental Monitoring System (GEMS)—a major step in the evolution of Earthwatch.

Seven program goals have been adopted for GEMS so that it can be responsive to the needs for global environmental assessment of potential threats to human health and the health of atmospheric, marine, and terrestrial ecosystems.¹ A priority list of pollutants has also been established. The design and implementation of GEMS is directed toward taking selected elements of this list into account along with appropriate related environmental factors so that respective program goals may be achieved. For example, in approaching the assessment of the impact of atmospheric pollution on climate, GEMS must not only provide a system for monitoring relevant pollutants, such as SO₂, suspended particulates, O₃, NO_x, and CO₂, but also for monitoring climate indicators, such as areal extent of sea-ice, the advance and recession of glaciers, sea level change, drought, desertification, and changes in freshwater bodies. In this way, cause and effect relationships may be critically investigated.

By decision of the third meeting of the governing council, the design of GEMS is now proceeding through the efforts of task forces of government experts directed at each of the respective goals of GEMS. In a similar manner, significant progress was made in developing the International Referral System (IRS). The basic purpose of IRS is to encourage

1. C. E. Jensen, D. W. Brown, and J. A. Mirabito, "Earthwatch", *Science* 190, no. 432 (1975). This referenced article is summarized for perspective.

the worldwide interchange of environmental information through the design, coordination, and operation of a system of referral to sources of environmental information and data.

The Present Situation

Earthwatch is not yet fully developed as a United Nations program activity. Although progress in GEMS and IRS has been noted, there has been very little effort devoted to the other two aspects of Earthwatch—evaluation and research.

As the development of Earthwatch proceeds, it can draw upon the ongoing and relevant environmental programs of the United Nations specialized agencies, governments, and non-governmental organizations. For example, in monitoring, a number of observational programs are underway that provide the basis for international warning, prediction, and assessment of health hazards, natural disasters, and other potential environmental concerns. The World Health Organization coordinates international programs for the surveillance and issuance of warnings relating to diseases, drugs, and occupational health hazards. The World Weather Watch of the World Meteorological Organization provides a comprehensive means for detecting, locating, and tracking weather systems and for issuing timely warnings and predictions of potential natural disasters. The observing of oceanic conditions is currently being developed under the Integrated Global Ocean Station System of the Intergovernmental Oceanographic Commission. The common use of facilities, sensors, and platforms, such as ocean buoys, ships, and satellites, is being planned in the observations of atmospheric and marine conditions. The Food and Agriculture Organization coordinates international observing programs in agricultural and fisheries trends which can also serve as a basis for the development of the global observing concepts of Earthwatch.

Data and information collected from these various observational programs must be communicated and processed. Such communications and processing of data must be shared by multidisciplinary activities for efficiency and economy. Likely candidates for this are the global telecommunications system and the global network of the world, regional, and national processing centers of the World Weather Watch. This telecommunications and processing system could be considered as a prototype for the global environmental network for Earthwatch. A beginning in this direction has been made with cooperative arrangements now underway between the marine programs of the Intergovernmental Oceanographic Commission and the atmospheric observing programs of the World Meteorological Organization.

A number of major international research programs exist and are coordinated by United Nations specialized agencies. The Man and the Biosphere program of UNESCO is designed to identify and evaluate the impact of man's activities on the biosphere. The International Hydrological Program is expected to develop a better understanding of processes that influence global water resources. The Global Atmospheric Research Program is aimed at providing scientific knowledge needed to improve the time range, scope, and accuracy of weather forecasts, and to gain a better understanding of the physical basis of climate. The Long-Term and Expanded Program of Oceanic Exploration and Research is a comprehensive program to study the processes of the world's oceans. Using these kinds of sectoral

research as a basis, there is a need to develop an integrated research program under Earthwatch.

The present situation in global ecology, as witnessed by the progress being made in Earthwatch, is that global monitoring (GEMS) and information exchange (IRS) are proceeding well; global research remains purely sectoral; and global evaluation (assessment) is not being addressed hardly at all.

Directions for the Future

The basic building blocks for Earthwatch exist in the national and international programs that have been described. Many new blocks are needed, however, before Earthwatch can emerge as the center of activity for global environmental assessment.

In the introduction to this paper, global ecology was defined. One dimension is directed at global commons. The air we breathe is a global common, and we are concerned about its purity. The climatic regimes of the earth are other global commons, and we are concerned that contaminants or other elements being introduced into the atmosphere may adversely affect the solar energy balance or may even destroy the protective ozone layer. These kinds of threats to which others, such as the acid rains, may be added are of concern to people everywhere. What is needed is a single international voice that is both authoritative and persuasive so that nations will listen and participate in appropriate international response actions. Ad hoc decisions in panic situations after a threat has surfaced should be eliminated by a recognized and continuing program of surveillance and assessment of the global environment.

Earthwatch is proceeding well with monitoring and information exchange, but no cohesive plan exists for achieving the end product—global environmental assessment. A framework should be adopted which calls for the designation of World Environmental Assessment Centers supported by Regional Environmental Assessment Centers. The function of each World Environmental Assessment Center would be to provide the focus and capability for intensive assessment of the worldwide environmental conditions relevant to its assigned sphere of responsibility. The world centers should have an international staff of qualified individuals contributed by participating nations.

The world centers would be expected to issue periodic assessment reports and special alerts, as appropriate, on the basis of which UNEP may wish to organize international actions, or individual nations may wish to respond in some meaningful manner. These world centers will need to lean heavily upon a network of data and information management facilities and upon the results of cooperative international research programs.

Earthwatch requires the participation of all nations so that all can benefit from it. The future of global ecology rests upon the success of this program of global environmental assessment.

SLEEP

Care charmer sleep, sonne of the sable night.

Samual Daniel

How like to death is this plunge into depths
Of another seaborne world of fantasy.
Our roots do curl and twist in the soil of
Primeval slime while eyes shine among the
Symbols of future spells and galaxies
Turning in slowly thumping cyclic beat
While consciousness quiescent sleeps alone.

What mysteries of Time and space do hint
Their patterns on the brow of heaven's glint
Or hell's poetic justice guilt embalmed
To scream a sinner's sorrow still becalmed?
While loved one lost can come again tonight
To augur bliss in gaily sparkling light.

Perhaps this seaborne world betokens still
Heightened response beyond death's hungry will
When childhood's glory shall come again for ever,
The magic music of the moon dispelléd never.

IMMANENCE

*(With respects to Dan Michel of Northgate
and his Ayenbite of Inwit, 1340.)*

The bird hovers upon the point, to strike,
To plunge upon unconscious prey below,
So consciousness does follow as the hawk
The hidden mind to stalk for splendour's gleam.
No peacock's strut knows ecstasy like this.

Yet in the fields beneath or wooded slopes
Pass huntsmen and their hounds to start their game,
A game which is not ours. Nor even theirs
Did they but know that all that moves but strikes
The flashing eye of the King of Eagles.

Desmond Tarrant

Desmond Tarrant is a British writer, critic, and teacher of English and American literature. He is the author of James Branch Cabell: The Dream and the Reality, and he contributes regularly to journals in Europe, America, and India.

DECADENT EXPRESSIONS OF EGALITARIANISM AND HUMANISM IN EDUCATION

Henry Winthrop

Introduction

Contemporary higher education, according to many modern critics, is being severely subverted. Its traditional learning objectives are being increasingly abandoned. Its standards of admission are being lowered year by year. Its standards of performance are a travesty on the task of determining what students have, in fact, learned. Its degrees falsely certify to knowledge and skills that their holders are supposed to have, but which, in truth, their holders have never possessed. Its teaching personnel in many cases are superficial in their fields of specialization and where this is not so, the specialists are indifferent to most other branches of human learning. Breadth of intellectual outlook has become a species of educational original sin. The academy is gradually being converted into a training ground for technicians rather than a proving ground for inspiring teaching and competent scholarship as well as the desire to advance the frontiers of learning. The French distinction between *l'instruction* (the imparting of skills) and *l'éducation* (the enlargement of human knowledge, awareness, social sensitivity and moral concern) is being vigorously polarized in America, with *l'instruction* becoming the central concern of higher education.

Perhaps the most debased areas of higher education are exhibited in the lowering of admissions standards and the dishonesties now rampant in the grading practises of many American institutions. The first of these two degradations centers around a bastardized form of egalitarianism that flies in the face of social realities, that expresses a distorted notion of humanitarianism, and that clings to the extremely false belief that the average man (IQ: 90-110) can tackle any type of subject matter the college or university has to offer. The educational consequences of this belief are appalling. The second of the two degradations mentioned has resulted in the grading practise, increasingly being institutionalised, of giving most students As and Bs—and this when their aggregate talents are inferior to the college undergraduates of several decades ago, by virtue of lowered admissions standards,

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and when, because of the knowledge explosion, there is more that must be learned than ever before. The consequences of this shocking dishonesty are beginning to come home to roost.

The present paper is concerned with an extended analysis of these two phenomena, their etiologies and both their practical and moral consequences. If anything I have to say here will add its mite to stopping or reversing the educational decadence reflected in the debasements upon which I have focused attention, my purpose shall have been served.

1. The Question of Grade Inflation

A host of circumstances have led to the lowering of grading standards in the American university. Let us touch upon some of these here. With the entrance into colleges and universities of students who would formerly have never been able to get into college, any effort to keep grading standards as reasonable as they were formerly would fail. The application of traditional standards would result in a very large percentage of students flunking out—a percentage that would be larger than was the case at many state universities a few decades ago. Both the lowering of admission standards and the institution of easier grading in state and municipal institutions have largely reflected the desire to encourage students registered at our institutions of higher education to remain there. This is, then, the practical expression of an effort to accommodate to the nature of state and city budgetary policies with respect to funding higher education. The general budgetary feature by means of which our public institutions of higher education are kept in line is the fact that the smaller the enrollment, the smaller the budget that can be made available to colleges and universities for operating expenses, payroll and other items. It therefore becomes a practical necessity to meet the operating procedures of both state fiscal officers and state legislators by retaining as many enrollees as appears feasible and preventing a substantial dropout rate by encouraging as many registrants as possible to continue to pursue their studies and degrees. One of the most obvious ways of encouraging students to continue on campus is clearly to create a sense of achievement and accomplishment by awarding them good grades, that is, As and Bs. But considering that the overall abilities of enrolled students today are inferior to those of several decades ago, if only by virtue of the fact that entrance standards have been lowered in a variety of ways, it should be clear that a generous allocation of As and Bs can only take place if grading practises are made more liberal than they have ever been before.

Entrance standards, of course, have been lowered in many ways. Testing procedures for admission have been made easier, to accommodate to the fact that reading and arithmetical skills have not been imparted to many students by either their elementary or high school teachers. Admission percentiles have also been lowered for entrance into academic institutions. This lowering acts as a grab bag or net that sweeps into colleges and universities large numbers of students who simply do not have the skills for operating at the college level. Social promotions, aimed at preventing psychological traumas, avoiding the creation of a sense of failure and defeatism among students and, of course, reducing the cost per student graduated from either elementary or high school—all these have been important

factors that have led to pushing ahead the intellectually ill-equipped, year by year. Many—though not all, of course—of those swept into college by the net of lowered qualifying standards have been the beneficiaries of social promotions.

Other factors of a non-academic nature have played a significant role in the lack of student preparation for college. Television is, perhaps, the most important of these. Talk shows in which the participants zigzag intellectually and disconnectedly from point to point do not encourage intellectual concentration or intellectual organization among viewer-listeners. Quite the reverse. They definitely encourage superficiality and lack of seriousness, and in no sense do they prompt or inspire their audiences to go forth to read and learn more about the subjects discussed. Give-away shows, soap operas and horse operas, and an obsessive preoccupation with sports events, promote a dysgenic sense of priorities among viewer-listeners and nowhere among these priorities do we find the inculcation of a love for learning. Many documentaries, of course, do promote curiosity and a love of learning but the overwhelming bulk of elementary and secondary school viewers are devoting their viewing time of twenty-five hours per week not to documentaries but to the more immature fare on television. Homes in which parents do not read very much, if at all, do nothing to counter the deficiencies I have mentioned. Most younger television viewers and radio listeners coming from such homes, do not develop reading habits for books or newspapers, although, of course, they learn rather early to turn only to the sports pages of their local newspapers.

The lack of relevancy in classroom subject matter, materials and procedures that some of the brighter, more idealistic or more socially aware students complained of in the 60s has also contributed to the low level of concern for education. Their complaints about lack of relevancy were quite justified. The teaching in the elementary and secondary schools that is so alienated from the social issues and social complexities of our time and from the deep personal concerns of students, particularly during adolescence, simply turned off many students. Demands for memorization, for the regurgitation of memorized material on exams, and avoidance by teachers of unpopular and/or dissenting points of view, all acted as deterrents to the growth of curiosity or the inculcation of a genuine love of learning. The failure to make our national problems—social, economic and political—come alive for pre-college students and the failure to relate international tensions to the nitty-gritty conditions that led to them, resulted in anything foreign becoming a closed world to elementary and high school students. In short, in many respects, irrelevance was enthroned. And once enthroned the student arriving at college anticipated that he would find a continuation of such irrelevance. He came in a sense with a special type of closed mind and no matter what he was taught or what type of instructor he had, he tended to find what he expected.

Considerations similar to the preceding apply also to private schools and colleges. They, too, needed enrollments in order to meet all expenses, including salaries, and to keep going. But as the fortunes of some members of middle-income groups declined, sons and daughters were pulled out of private schools, colleges and universities. As for these sons and daughters, they were not very much different from those late adolescents who entered public colleges and universities. If they had attended public elementary and high schools, they, too, were subject to the educational habits, practises and deficiencies that prevailed on these levels.

There were, however, two major educational differences between the offspring of the rich and the economically well-off and the offspring of the low or moderate income groups. If the offspring of the economically well-off had attended any of the outstanding secondary private schools—Choate, Andover, Exeter, etc.—they had, indeed, acquired a superior type of education. This was also true, however, for the gifted offspring of the low or moderate income groups if they had been lucky enough to attend the Boston Latin School or any current schools with standards as high as that of the long defunct Townsend Harris Hall High School in New York City. The Bronx High School of Science would be a current example in point. The other major difference between the offspring of these two groups was that well-to-do parents who enrolled their children in nationally distinguished secondary schools probably provided a much more stimulating intellectual atmosphere in the home than did parents in the low and moderate income groups.

Finally, the attitudes of the typical taxpayer have also contributed to the lowering of standards. There has been a recognition of the fact that educators at all levels have failed to pass on the information and skills for which task they were being paid; this failure has been interpreted as a lack of accountability and responsibility. It has resulted in a sense of moral outrage and a feeling that taxpayer monies have paid for services that have, in fact, never been delivered. Taxpayers whose children are already grown and away from home are among those now most prone to refuse to vote for or support bond issues that are intended to improve the school situation in a variety of ways. The average taxpayer has come to resent educational experimentation and innovation as unnecessary frills when he learns how many students have not acquired the three Rs—reading, writing, and arithmetic—and he is prone to regard the money spent on these frills as wasted. As a result he has demanded that less money be spent on education that has failed of its purposes, and many state legislators have sympathetically accommodated to the taxpayer's outcry by reducing state funds to be made available for public education. The reduction is further necessitated by the economic hard times through which we are now passing. The reduction in funding, itself, of course, further amplifies the trend towards the lowering of standards in a variety of ways.

Side by side with this situation is the widespread desire on the part of taxpayers to have their sons and daughters receive a college education. It is widely felt that economic security and professional achievement are well nigh impossible without a college degree. The pressure to allow all high school graduates into college has clearly denatured the aggregate quality of the college undergraduate population we are now receiving, and has been accompanied in some instances by an effort to water down the content of many important and standard courses. The effort to cater to an undergraduate population that, in the aggregate, is less gifted than of yore, and the effort to bring many courses within the learning ability of such a population has clearly reinforced the drive towards the lowering of standards. The average taxpayer does not think in terms of the intellectual and achievement requirements for a college education. He is concerned solely with getting its advantages for his offspring. His attitude is best described by the German saying: *Jeder Mutter's kind ist klug* (Every mother's child is bright). In addition, the average taxpayer does not note the incon-

sistency between his cry that less money be wasted on education and his demand that all high school graduates be provided the opportunity of going to college if they so desire.

All the preceding, then, are some of the factors that have led to lowered admissions standards and subsequently and derivatively to grade inflation. In the light of these considerations, what can we say about the causes of grade inflation and its moral and practical consequences?

2. Some of the Causes of Grade Inflation

If many colleges and universities all over the country have lowered entrance standards for admission, what are the implications of this lowering of standards for the group learning situation that is to be expected? The lowering means that we know in advance that the distribution of undergraduate learning ability is not as good today as it was, say, in 1931 to 1935. The group that was in college from 1931 to 1935 was clearly more highly selected with respect to learning ability and earlier achievement. This is a reasonable consideration if we recognize that the curricula of those days and the high school records of that period reflected a more demanding educational regime than those of today. Those who had not put four years into attending high school in that earlier period took entrance examinations that were unquestionably more difficult than the College Level Examination Program (CLEP) hurdles given today. At the same time the undergraduate today has to learn more than would have been expected of him during the early 30s, by virtue either of advances in knowledge in fields in which facts and theory are of the essence or because of additions to creative achievements in the arts and humanities and the greater aesthetic and intellectual sophistication now existing in these latter areas.

If we add to this the fact that recent research also indicates that large numbers of college freshmen, and many upper classmen in addition, can read only at the level of a high school freshman, we are forced to recognize that the task of effective learning for individuals with such reading handicaps is more challenging than it would be if their level of reading ability was the same as that of their forebears in the depression 30s. The recognition of this fact by educators in recent years led to what has been called "compensatory education", that is, teaching the standard courses that are required of the undergraduate but seeking to provide instruction via textbooks of a modified type. These are to be textbooks that (1) are written at a vocabulary level closer to the actual functional vocabulary of the entering college freshmen with a poor record of high school achievement, and (2) which emphasize concepts that are less demanding than in the standard text used for the undergraduate and which effect their explanations in a somewhat more concrete way than does the standard text. It was necessary to try to introduce special textbooks for compensatory education simply because there are practically no college textbooks written for students at the limited level of reading ability possessed by numerous undergraduates—a level which had been unearthed by research.

What this deplorable situation implies with respect to learning ability is that large numbers of our undergraduates, who were admitted in recent years to colleges and universities because of the application of less demanding standards, possess less learning ability than their forebears of the early 30s—at least where a considerable part of the learning process

requires the ability to read and comprehend both the text and outside reading assignments.

In the light of the considerations we have stressed above, a valid distribution of grades could not possibly be as creditable in 1975 as would have been the case in 1935. Any valid distribution of grades today should therefore show fewer As and Bs and more Cs, Ds and Fs. Instead, we find that in recent years at many institutions there have been substantial percentage increases of As and Bs and substantial decreases in all other letter grades. In addition, the allocation of a D grade is becoming rare in many courses, while the allocation of an F grade is already nonexistent in some of them. A large number of instructors employ a policy of giving out no grade below C. This virtually ensures that any student can pass the course even if he fails to do a stitch of work in it and even if he has learned nothing. The avoidance of Cs, Ds and Fs by instructors is, in many cases, the result of a desire to achieve popularity with all types of students and thus ensure subsequent enrollments in their courses—in the face of the stiff competition for enrollments that has resulted from declining numbers attending some colleges and universities.

In others cases, instructors avoid allocating Cs, Ds and Fs—even where they are deserved—out of sheer cowardice, since many students whose self-esteem exceeds their abilities will institute grievance procedures that embarrass the instructor and affect future enrollments. Other students, intending to go to graduate school and knowing that some graduate admissions officers are prone to reject an applicant who has even one C on his record, let alone a D or an F, will fight fiercely to change any grade that is below an A or a B, either through the same grievance procedures or by complaining to pliant chairmen and deans who aim to please. In other cases, students disappointed with their grades get their friends in student government to give the offending instructor unfavorable publicity in the student newspaper, or they persuade their acquaintances in certain student organizations to call special meetings concerned with the maltreatment presumably extended to the student who feels he has been given too low a grade. This special meeting will be preceded by circulars given out all over campus, stating what the situation is that has made it necessary to call the meeting. All this will be topped off by an inaccurate story in the student newspaper concerning the biased and sadistic instructor who unfairly grades students whom he does not like. Occasionally a small student demonstration will be called and held outside the building in which the offending instructor's office is located; this will be accompanied by the public distribution of circulars, and followed by a visiting delegation that insists on seeing the president of the institution and informing him of the repressive activities of the unsavory instructor—repressive activities that are exercised through the "arbitrary" or "high-handed" assignment of grades.

Nor are these the only methods used to annoy and harass the instructor who seeks to grade in relation to performance. Many instructors, continually harassed in this fashion, throw in the sponge, give the student the grade he asserts he deserves, and spend the following weeks trying to soothe the voice of an accusatory conscience that refuses to be stilled.

The result of this academic nightmare, which most instructors wish to avoid at any cost, is to find a method of avoiding it that works. Instructors have found that the best way to avoid student tyranny is to employ a safety factor. This is done by simply overgrading

all students by one letter grade. The result is that aggregate grading practises will tend to be too liberal and current grades have become a very poor and inflated index of student achievement.

To recognize this situation and attempt to rectify it by a reasonable downward adjustment of grades is both practical and honest. To seek to reform the grading practises of instructors who are contributing to the grade inflation and misrepresentation now so rampant throughout the country is not something that is reprehensible. Rather it is a movement in the direction of grading honesty and educational integrity in intellectual assessment. To call the effort to introduce such needed reform a violation of academic freedom is, I think, highly misleading. How the downward rectification is effected is of minor importance. Some educators advocate that grades be distributed according to the constraints of the normal curve—seven percent As and Fs, twenty-five percent Bs and Ds, and thirty-six percent Cs. Others suggest different procedures. Many of our academic reformers, however, recognize the absurdity of a situation in which transcripts of records in recent years reflect record percentages of As and Bs, and do this for a population that possesses less learning ability than the college undergraduates of four or five decades ago. Furthermore, the inflated distribution of As and Bs is occurring in the face of the fact that more material has to be learned today than formerly, and in the face of the fact that this material is of considerably greater difficulty than was the case for the material that had to be learned four or five decades ago.

What faculty members and administrators in many institutions are really worried about is the critical attitude of state officials and fiscal officers when a course, program, department or college fails to obtain sufficient enrollments or their full-time equivalents (FTEs). Administrators and faculties everywhere wish to avoid the pressures and budgetary-reduction consequences that usually result from conspicuously reduced FTEs. One way of staving off the undesirable consequences of reduced FTEs is to encourage more students to enroll in certain courses, programs, departments or colleges. And clearly the best way to encourage increased enrollments is to establish a reputation—both on and off campus—for giving out “good grades”, defined as a liberal dispensation of As and Bs.

Such a liberal dispensation is welcomed—and occasionally demanded—by certain types of students. Among the more conspicuous of these are the following: (1) the intellectually lazy student who does not belong in a college or university but who managed to get into one by virtue of the less demanding standards of recent years; (2) the student who wants his or her transcript of record to suggest that he or she is a person of intellectual substance, even if that record runs counter to reality; and (3) the student who must obtain a high grade point average (GPA) in order to get into a graduate or professional school.

3. The Moral and Practical Consequences of Grade Inflation

There are a number of deplorable consequences that emerge from grade inflation, no matter where it is practised. First of all the student, himself, who has undeservedly received high grades, is shortchanged. He (or she) is led to believe that he possesses certain information and skills which, in fact, he never really acquired. The result is that when he gets a

job after graduation that requires the information and skills he really lacks, he cannot hack it. This type of student will probably not only fail in the marketplace in subsequent years, drifting from job to job, but he will often become an embittered individual with a grudge against a society ("the system" is the way he will probably label it) that cannot make an economic niche for him in the scheme of things. If he does succeed in holding down a job for any length of time, it will usually be a menial one. Lacking the skills and information he should have acquired at college, he will have nothing really that it will be worth anyone's money to buy. For this reason he can expect to obtain only those types of jobs that just about anyone can fill.

Rarely will this type of student entertain any self-doubts or believe that his fate lies in himself rather than in the stars. Millions of such students will probably constitute a substantial portion of the welfare rolls of the American future. This is a fate increasingly likely as future U.S. governments recognise the need to reduce wasteful spending and frills in the face of world shortages of every sort and the high prices at which most raw materials will come. Job creation will be more limited as future U.S. governments abandon corrupt applications of Parkinson's Law, preferring rightly to use labor for the unfulfilled necessities of the future economy of the United States.

In short, this type of student, who failed himself at college and who will fail himself when he enters the post-industrial society into which we are emerging, will constitute a new *lumpenproletariat*, less able to fit into the America that is emerging than the millions of semi-skilled laborers of the immediate future. Students of this type will be the *déracinés* of tomorrow, the chronic winos, stumblebums, drifters, moochers, rabble and marginal men of a world they never made—to paraphrase the title of James Farrell's famous volume—but, nevertheless, a world to whose reasonable and responsible standards in education and expectations in the world of work they either will have been unable or unwilling to adapt.

The second consequence of grade inflation is that the hard-working, conscientious and responsible student who receives high grades that *are* deserved is somewhat discouraged. He notes that some students who never crack a book, never tackle an outside reading assignment, rarely contribute anything worthwhile in classroom discussion, and absent themselves a large part of the time, can make As and Bs with little difficulty. Thus the hard-working and competent student is shortchanged in the sense that the lazy and undeserving student later competes with him for desirable jobs that the ill-equipped student does not deserve and cannot handle—a fact that, unfortunately, prospective employers are unaware of. The ill-equipped student also competes with the studious, hard-working and conscientious student for acceptance into graduate school. Consider the latter situation. If the transcripts of record of both undeserving and deserving students show the same GPAs, admissions officers and committees are unable to distinguish between applicants in the two groups. With the demand for admissions being greater everywhere than the quota for graduate admissions, quite often the undeserving student may make it, while the deserving student finds that he has been turned down. Such a situation clearly shortchanges the serious student and may make him somewhat bitter.

Nor is this the only way in which the studious, serious and conscientious student gets

shortchanged. An instructor who wants to be helpful to students and keep them motivated never ignores the needs of any student, bright, average or slow. This means that if he has a lazy and an ill-prepared student who doesn't take a course seriously and refuses to study, relying on what he can get out of the lecture in the classroom, trouble is brewing. This type of student will ask question after question on matters that are taught in every elementary school in this country. Many of these aggressive but unstudious types will hog most of the class time, asking questions on matters that the entire country assumes they learned in elementary school. The result is that the conscientious and kind instructor must pitch his lectures to the level of this ill-prepared student. The average and bright students become terribly bored at first. Later they become angry, visit the instructor in his office and complain that they are learning nothing in the class because the instructor is playing favorites. He is accused of pitching his lectures to the level of the inconsiderate and unprepared students who are taking up most of the instructor's time trying to get him to supply the education they should have acquired or received in elementary school. Average and superior students thus feel shortchanged and they are right.

If, on the other hand, an unkindly instructor pitches his lectures to the average and bright students, the unprepared and lazy student will complain to chairmen and other administrators that he is being maltreated and that the instructor is elitist and regards him as stupid. As a result the instructor is warned by the administration to change his attitude. Thus he can't win. He is damned if he does and damned if he doesn't.

The third result of grade inflation is that future employers of our poorly educated students whose degrees are the result of grade inflation are also shortchanged. They are shortchanged because when work requiring the information and skills he should possess is delegated to the unprepared ex-student misfit, he is unable to get it done. What work is done is done improperly, inefficiently and wastefully. That is why many business leaders today are in an uproar over the quality of some of the college graduates their companies have hired. This situation is one of the causes that has led such business leaders to raise a hue and cry over the lack of accountability of modern educators.

There is a fourth deplorable result of grade inflation. The honest and responsible teacher is shortchanged. He is not only forced to teach subject matter for which the student is not prepared (previous passing grades having concealed the student's ignorance), but he is expected to debase his own grading standards if he wants student evaluations to do him justice. Here, if anywhere, is a real example of the violation of academic freedom, for the type of teacher who tries to hew to the traditional purposes of education finds himself hamstrung and unable to do the job for which he was trained and for which he is to be paid.

This is not only unfair to the instructor but it is also professionally discouraging. The well-trained and conscientious instructor cannot perform at par when he is expected to teach students who are not ready for what he has to offer. If we are willing to call a spade a spade we must recognize that the able and willing instructor is being hamstrung. He is not being given the proper grist for his mill. A painful situation of this type effectively converts the task of teaching into an atmosphere of professional frustration in which the good teacher cannot fulfill himself. It does not make sense either administratively or in terms of cost or in terms

calling for the efficient use of time in the classroom to ask a teacher of mathematics or statistics to do his job when a large number of students enrolled in his classes do not really understand even so elementary a matter as the four fundamental operations of arithmetic. Forcing a competent instructor to deal with incompetent or ill-prepared students constitutes a waste of human resources. It also subverts the traditional and fundamental meaning of education—an eager and prepared learner who is ready to expand his intellectual and educational horizons through the knowledge and wisdom a respected teacher and master can provide. Situations that chronically allow unprepared students to enter the classroom of competent and well-disposed instructors are also situations that humiliate and debase him. Such situations are uncalled for.

The fifth and final unhappy consequence of grade inflation is its effect upon the community at large, the entity that not only supports financially the entire process of education but is the entity for whose eventual benefit the process of education is intended. The American taxpayer is also shortchanged by grade inflation. He finds that his tax money has been used to produce a graduate who is not competent in the area his transcript of record certifies he is competent. Furthermore, the taxpayer's money has been wasted in helping to pay teachers who knowingly contributed to this deplorable situation and who continue to contribute to it. Members of the community at large begin to realize that the transcript of record in many cases is an untruthful public document and that a document of this sort, which plays a major role in getting a student into a professional school of business, medicine, dentistry, law or other types of professional post-baccalaureate training, is highly misleading.

The taxpayer thus begins to realize that a percentage of incompetent physicians who later face malpractice suits were probably the products of dishonest certification via the transcript of record that got them into medical school in the first place. Likewise, the much-suffering taxpayer also begins to realize that a percentage of incompetent lawyers—chiefly shysters and ambulance chasers—were also probably the products of unintended but still dishonest certification. Finally, the citizen discovers—as have business executives and government supervisors—that a percentage of the very people who teach his sons and daughters are poorly acquainted with the four fundamental operations of arithmetic. He also discovers that they sometimes lack reading skills with respect to the comprehension of certain types of analytic literature, such as printed government publications, commission reports or even the government's booklet for making out one's tax return. When the taxpayer discovers that there are many incompetent teachers, that is the last straw. He comes out fighting and shows the marked disrespect for the teaching profession that is so common today.

Thus we see that grade inflation shortchanges everybody. Everyone loses and nobody gains. A reaction to all this degradation of higher education has now set in across the United States. Books and recognized periodicals—some in and some outside of education—are taking stock of the extent to which academia has dug its own grave. Many academics are now calling for a reversal of direction. So, too, are a number of honest and mature students everywhere.

[To be concluded in the issue of July 1976]

THE ROYAL PYJAMA'D HORSE--IV

Maggi Lidchi

The feeling that he had when he woke up was one of great wonder at having seen even the shadow of the tiger. He thought that he had never been so happy in his life, and then slowly this feeling turned into apprehension because he remembered that it was Pomegranate who had started all this and he didn't trust her one bit, not one bit further than he could jump. He realised immediately that he was in a very very very tight spot indeed. Because having to be with her, how would he protect himself from her enchantments? When she spoke that way it was like rain falling after dryness. It was like the sap of sweet grass, it was like the sound of the hoofbeats of his brothers that he had heard in the dream. Irresistible. Even now he wanted to go back and ask Pomegranate to talk like that again; he thought he must be going mad.

"Ah chain me to the mast", he groaned, and then he was sure he was going mad because that wasn't his way of speaking at all. Pomegranate's lunacy must be contagious.

"To the mast", came the groan like an echo. It was Pomegranate. There was a nasty shudder of wings as she settled down on a branch a few inches from his nose. "You shouldn't have gone so far and so fast Chandrakant", she scolded. "I'm not as young as I was. And what would we have done if you'd lost me."

"Well obviously I haven't", said Chandrakant, only slightly shaken now that he could see the familiar old fright with her feathers

askew. She certainly didn't sound like the hoofbeats of his blood brothers now. She sounded just like the nuisance bird that she was and he realised that he must have been imagining things. He said in an almost normal voice, "It's not so easy to lose you, is it Pomegranate." He now felt so confident that he asked, rudely, "Hey Pomegranate, what made you speak like that?"

"Speak like that. Oh didn't you know, I'm a poet and it sometimes seizes me."

"Well it's not going to seize *me*. You can be sure of that", he said warningly.

"Sure of that. You never can tell", she said. "It gets the most ordinary people sometimes. Just anybody it settles on." And Chandrakant suddenly saw "it" as a brilliantly coloured bird swooping to perch on your head or seizing your mane and not letting you go until it had had its unimaginable way with you. He could still feel Pomegranate's talons on his shoulder.

"Listen Pomegranate," he said, "there's one thing I must make quite clear. If we're to go on with this thing at all you have to promise not to speak like that again."

"Like that again. What did I say?"

"You know, doing that thing with your head about the zebras and the flowers."

"Zebras and flowers. Ah, 'they stood knee deep among the scarlet flowers'."

"Don't!" screamed Chandrakant.

"Don't. You don't want me to recite

poetry? Chandrakant, that's impossible. With a true poet it's just not possible to promise that. It just seizes you."

"You mustn't if you want me to think up something kind to say. I can't concentrate. It's very distracting."

"Very distracting. But there is nothing I can do about it."

"Nothing whatever?"

"Nothing whatever."

"But you must. You must try."

"You must try. I can't"

"There's no such word as 'can't' in the English dictionary." (One of the mares who had heard it from one of the elephants who had heard it from an English governess at the palace had once said this to him)

"The English dictionary. I can see that you don't know the facts of life Chandrakant. There are some things outside the covers of the English dictionary."

"Well then Pomegranate I'm sorry to tell you that I don't see how you're ever going to get a heart for yourself."

"A heart for yourself. And how are you going to subjugate the world, eh Chandrakant?" Pomegranate cackled. You can see that when her poetry was in question Pomegranate could be quite firm, and sometimes malicious.

"How often does it usually take you, this pottery?" (It is interesting to note here that Chandrakant never did learn this word.)

"This pottery" she was compelled to stutter out. "Well very rarely, I'm afraid, so you needn't worry. But I must tell you that although I know what I really need is a heart and that even my poetry suffers from the lack of it, when it comes upon me—were I ever offered the choice—I would choose poetry. It's my fatal flaw." As you can see Pomegranate too was in a bind.

"Well, you say that it's not likely to seize

you again for a while?"

"For a while; no indeed not."

And that was that. Pomegranate was being quite truthful. It sometimes left her alone for a whole year, but then she had never crossed a continent like this in search of a heart, and she had not taken into account the affects this had on her sensibilities. So she was very torn when she felt rhythms pounding in her blood quite soon after her first outbreak because she was afraid of exasperating Chandrakant and losing the opportunity of procuring a heart. Fortunately the long flights during the day when she had to struggle to kpee up with him left her so tired by evening that even if she went to sleep muttering something rhythmic, Chandrakant couldn't hear her. They were in fact both so tired after days of moving over arid plains in search of food and shade that their exchanges were mostly sharp and irritable. And it seemed to them both that they were getting nowhere, for Pomegranate had felt no pang of hope in the gap in her feathers and Chandrakant felt little impulse to say anything to Pomegranate at all except to ask her to turn her face in the other direction.

One day he suddenly found himself face to face with a strange looking animal whom he was forced to challenge, because the moment he saw him this strange wild-looking animal burst out laughing. Of course Chandrakant looked around to shoo Pomegranate out of range, but all he could see was the broad plain and the sky, and Pomegranate was nowhere in sight. He turned back to the animal who was now jumping up and down on his hind legs in uncontrollable mirth.

"What's so funny?" he asked, at which the animal started rolling on his back he was laughing so much. Perhaps Pomegranate had told him about the tail feather? had flown on ahead and actually arranged this?

"Do you know Pomegranate the Parrot?" he asked, at which the animal yelled so loudly that Chandrakant hiccupped. Say kind things to her! Destroy her! It was at this point that his brain began to boil.

"I'll kill you," he said, "or tell me what you're laughing at." He had meant to say it the other way round but everything was flashing back to front in his mind so that it was a wonder he got the words out at all. The animal stopped laughing to try and work this out. As he wasn't clever, it took him some time and the silence in which he worked at this riddle was nerve-racking, especially as a message was somehow flashed to Chandrakant that he'd said something he hadn't meant. More than just nerve-racking on this deserted plain. It was positively eerie as they both stood there trying to work out what had been said and whether it corresponded to what had been meant. Suddenly the laughing animal opened his mouth wide and started again.

Chandrakant felt the lump that had been left by the lumpy animal grow and grow until it filled his whole chest and there was no room for breath. He started banging his forehead on the ground but the feather would not go. And though his head was beginning to throb, it somehow gave him relief. So he banged harder. And when at last the thoughts began coming again in the right order, he put his head up and, squinting, said "Come'n now. What are you laughing at?" The other animal just swayed his head a little so Chandrakant was forced to conclude that he and his feather were being imitated, and the choking lump slowly subsided and the boiling rage that had already simmered down went quite still and Chandrakant just felt cold despair. What could he do? What in the world could he do? Slowly with bent head he walked away from the laughing animal. He walked feeling bowed and

old and if you'd seen him from the back you would have believed him a broken old hack. Not that he looked so good from the front either. The corners of his mouth were pulled down and his eyelids drooped at the corners. He sagged inside and outside. The sound of laughter followed him for a long time. He couldn't even break into a trot. His knees had forgotten how to bend; he walked away stiffly.

What he would have liked more than anything in the world was to feel Mukund's trunk caressing his head. It no longer seemed at all a desirable thing to be the only Royal Pyjama'd Horse on the horizon and his mind turned to the dream again.

But that was a dream and he had nobody to talk to. Nobody in the whole world. Suddenly there was a fluttering of wings and he felt the bird alighting on his shoulder. He plodded on in silence. Once or twice he was about to tell her to get lost but he didn't. They could still hear the laughing animal though somewhat more faintly. When they had almost lost the sound and before it was too late Chandrakant sighed and said, "What's that animal?"

"What's that animal? That's The Laughing Animal. He laughs like a hyena", said Pomegranate. "You mustn't let him rattle you. He laughs at everything."

"No he was laughing at me."

"At me. I tell you he's quite mindless. He laughs at everything and everyone."

"No, I could see he was laughing at me."

"Laughing at me. Why should he laugh at you? Did you speak to him?"

"No, not specially", Chandrakant heaved a sigh. "I don't know why. I suppose he was laughing at this feather", and Chandrakant squinted up at the red blur but it made his eyes ache and his stomach nauseated so he looked down at the ground again.

"At this feather. I don't know why he

should laugh at the feather", Pomegranate said in astonishment (whether pretended or not I cannot say). "Nobody laughed at it when I wore it. In fact, it was much admired."

"Yes, yes I know." Chandrakant's voice was very very bitter, "Much admired and much desired."

"And much desired. I tell you Chandrakant you mustn't take it like that. You're getting very paranoid." Chandrakant was much too dispirited to learn a new word but he asked automatically what this meant.

"What does it mean. It means that you think that you're the most important thing in the world."

"Well isn't that correct?" asked Chandrakant in surprise. "I wish Mukund were here; I liked it when he talked. It used to make me feel good. I liked it when he talked about the tiger. Can't you talk about the tiger Pomegranate?"

As you can see Chandrakant had sunk very low in spirits to be asking Pomegranate to talk about anything.

"The tiger Pomegranate. I can talk, Little Zebra. As you know that's what I'm good at. I can talk words, but I can't make you feel like Mukund because . . . you know", she finished pointedly.

"You haven't got a heart", Chandrakant finished for her. "Pomegranate you can see how it is. I don't have any kind words to spare."

"To spare, to spare", for when Pomegranate was excited she double-repeated. "I just felt, I think I felt a little pain in my missing feather. Quick, quick Chandrakant."

"What, what? You're hurting my shoulder. Hey stop that", for Pomegranate in her excitement was digging her claws into Chandrakant. And then Chandrakant, in whom everything had slowed down, realised that he had felt

just the slightest movement in the roots of his brow and he knew that Pomegranate was trying to urge him to say something kind. He tried and he tried but nothing came so he said at last, "Look I can't. I just can't. I know it would be to our mutual advantage if I could so don't think I'm not trying. But nothing comes."

"Nothing comes, nothing comes. Of course not. Everyone knows that you're not allowed to think of advantage. It's supposed to just well up or spring forth they say, like good poetry. You're not allowed to think of results."

"Then we're sunk", said Chandrakant, and Pomegranate who was usually optimistic now felt whatever she had instead of a heart sink. For the first time since they had set out she was prepared to let Chandrakant go on alone. In fact she flew up into a tree and watched Chandrakant walk away, and he was so sunk in his own despondency he hardly noticed and just walked on and on. Because what else was there to do?

So you may be surprised to hear that a few minutes later he had broken into a trot. His heart had lifted. This is what happened. It was, I had forgotten to mention, an unusually hot day, and a little after Pomegranate had left his shoulder he spied a clump of trees ahead. Up to now he had been walking with his head sunk pretty much on his breast. But now he chanced to look up, and seeing the trees, could think of nothing more appealing than to lie down in their shade.

"To sleep, perchance to dream" he mumbled, but such was his condition at that point that he didn't even notice what he was saying or wonder where the strange words had come from.

And, in fact, as he got near the trees he saw a creature such as he might have seen in

a dream. His heart quickened. She was cropping the grass and suddenly it was as though Pomegranate was swaying her head in the air and putting him under a spell again, except that she wasn't like Pomegranate at all. He stayed a little away from the trees because though a great kindness suddenly overwhelmed his heart and he needed very much to go up to this creature and say something very nice and very kind to her, he was with equal suddenness overtaken by a great bashfulness which held him back. Perhaps it was the memory of the laughing animal or even of the lumpy animal or of the two compounded, which you may well imagine made something very horrible indeed, for both were extremely ugly. But this creature was heavenly and very much like himself. There was light and darkness on her coat and he could see ephemeral flowers in the dark green of the shade around her and rose-coloured plumes about her head. And for the first time, the very first time, Chandrakant was at once both happy and oblivious of his plan to subjugate the world.

But when he tried to go nearer to the trees he found his legs trembled so much that he couldn't move, and when he tried to call out to this exquisite creature no words came. And then it didn't matter because he was happy just watching her. Since she moved in the shade he could see her only dimly, but then she stopped cropping and lifted her head and tossed it and stood with her foreleg raised like a dancer. Suddenly Chandrakant knew that he was looking at a Royal Pyjama'd Filly. He wanted to say, "You have made my heart glad at last. I have been waiting for you all my life. With you at my side I know I can subjugate the world." But he was shy as I have said and so he just waited and looked, with the words stuck in his chest, not getting

anywhere near his throat. Suddenly there was—you may find this difficult to believe, Chandrakant certainly did—a flutter of wings. He understood what had happened of course. Pomegranate had felt a tug at the missing feather and had come to claim her kind words. Quicker than thought, Chandrakant began making his declaration to the vision of loveliness in the shadows; but even as he spoke there was a fluttering of green and red and jade-blue before his eyes, for Pomegranate had not seen the lovely animal in the shadows and thinking the kind words were for her, the small dead thing that was her heart absorbed them like sweet oil and began to stir. By the time she saw the filly coming out of the shadows it didn't matter because once this process has started it is irreversible. When oil has been absorbed by paper it is a thankless task to try and squeeze it out. Pomegranate felt this first stirring and knew she was on the way to having a heart. And though it was painful because of the newness of the sensation and the unusedness of that place in her breast, still she was glad. She was even exultant. She was flopping about in the air half swooning with this new and palpitating thing hurting inside her when she saw a haughty young filly with head held high standing at the edge of the grove. Her coat was white and she was very beautiful. Chandrakant had not been mistaken about that but she was not a zebra, not at all. It was only that the moving leaves of the trees and Chandrakant's lonely heart had dappled her in his own image.

"I think you'd better leave quickly", the filly said in a very aristocratic voice. "My brothers have an old feud with zebras and if they see you here there'll be bloodshed. If they know you have so much as spoken to me I can't answer for your life. You see, I am the Princess Buttercup." She said all this

without moving her upper lip and in a perfectly detached manner which left no doubt even in Chandrakant's mind as to how she felt about him. In fact she felt nothing, and some animals, to say nothing of people, are very good at making you feel like nothing.

She had already retreated into the shade when Chandrakant called out, "I'm not a zebra. I'm a Royal Pyjama'd Horse." How was it that nobody could see this?

The Princess Buttercup gave a clear silvery laugh of amusement, then her delighted voice rang out from the trees. "A Royal Pyjama'd Horse is it? Oh that's truly marvellous. I must go and tell them at home", and she could be seen emerging from the trees a white and beautiful thing cantering effortlessly over the plain. Then she broke into a gallop as though she simply could not wait to tell someone this amusing story. She had a long easy stride and she quickly grew smaller and smaller and then disappeared on the horizon. But even when she had disappeared, she seemed to have left a trail of beauty behind her, a trail of pain and beauty.

Chandrakant turned to Pomegranate. His eyes were full of tears. "Why?" he said.

"Why?" And that's all she said but it wasn't quite the old compulsive repetition; her embryonic heart was working overtime. Not only was it full of its own pain, but it absorbed Chandrakant's too, almost more quickly than she could bear, so that what happened was that a first single tiny tear welled up in her and stood in her beady eye. Only, since the heart was still very rudimentary and hard, unyielding in substance as it were, the tear would not fully liquefy. It was like a half-dissolved, translucent pearl through which Chandrakant could see her iris. And then it fell on the hard ground at his feet. It was very beautiful, but whereas he might once have graciously of-

fered it a place among the crown jewels, he now merely stared at it apathetically. But as he stared he saw that Pomegranate's "Why?" had struck some not quite liquid ripples in it, and a scene appeared as they say it does for crystal gazers. There they were, he and the white filly and Pomegranate. And as he spoke the kind and loving words to the Princess Buttercup, he saw them bound uselessly off her heart and strike the little hard black pellet in Pomegranate's breast which had been waiting for them for a million years. Not that it helped him much. There had been no loosening whatsoever of the feather. Nothing seemed to help him anymore, nor did it seem that it ever would again. It was at this point that Chandrakant resigned his hopes. It just didn't matter anymore, none of what he had planned. He sighed. And then he happened to look up, and he saw Pomegranate staring at him with a brand new look in her eye, both pleased and also as though she had a cramp in her side.

"Well I'm glad somebody got something out of it", he said a little grudgingly, and this being so and the sentiment not being particularly exalted, you may be surprised to know that immediately there was a sharp tug in the roots of his brow and the feather was loosened. Thus this somewhat desultory phrase which for someone else might not have been taken into account at all, did, for Chandrakant, count as his first kindness, and his first promise was redeemed. Not only that, but as Chandrakant spoke the words, the pain of the new condition lessened and Pomegranate's heart settled into its new rudimentary cycle.

You may imagine that things changed radically for these two travellers and that everything now proceeded smoothly and rapidly.

Not at all.

Something had changed, yes. Things were

different, yes. But were they easier? The answer is, no, they weren't. At this point some people say anxiously, "Don't tell me they were more *difficult*?" But sometimes things do seem to get more difficult, so I have to go through with this part of the story, painful as it may be.

The next morning, Chandrakant woke up feeling very tired. The previous day had been so full, so eventful. What with the laughing animal, and his humiliation with the Princess Buttercup, it had been just about the most terrible day in all his life. He tried to remember what it was that he had felt pleased about last night before going to sleep. Something about having fulfilled his first promise and the feather having been loosened. She'd probably be expecting him to say kind things all the time now. He could just picture her regarding him with that new look of hers, expectant, disappointed, making the best of things: it didn't make him feel very kind at all. It made him uncomfortable. It made him cross. In fact when he looked up into the branches he was delighted not to see Pomegranate there. He hoped she would be a long time about finding breakfast; perhaps when he'd had something to eat he'd be able to manage a kind word or two and get it over with. After all, since he'd done it once there could be no serious problem about doing it again sooner or later; she'd just better not expect anything before he was ready. It was a question of time and mood. Probably it should not be attempted on an empty stomach early in the morning, at which time he was never at his best. He dozed off, and when he woke up, he found Pomegranate staring beadily down at him which made him very angry.

"What are you doing up there?"

"Doing up there. Nothing." His anger had startled her back into her old compulsive

stuttering repetition.

"I've given you one set of kind words and there you are like a scavenger bird waiting for more, waiting to pick over the dead bones of my heart", he said hysterically (there is nothing like hysteria to make you mix your metaphors).

In fact Pomegranate *had* been waiting for more kind words. She'd had a taste and she knew that it was just a taste, and there she was sitting up on her branch yearning for more. And Chandrakant knew. He sprang up and galloped away snorting and fuming, and if the rosy plumes had been more than a poetic image, his would have been black and would have shrivelled every leaf on every tree in the vicinity.

At this point he decided that he would get right away from Pomegranate. He never wanted to see her again. He was beyond thinking of consequences.

So he galloped and galloped until he was half dead from fatigue and hunger, and finally dropped under some trees secure in the knowledge that Pomegranate could not possibly find him now. There is no comparing the speed at which an old parrot can flop along with that of a young zebra in good condition racing away from a spell. But perhaps he wasn't as secure in the knowledge that she wouldn't show up as he told himself he was, for he listened anxiously for that dreadful fluttering. And since it was dusk, he even found himself imagining that her beady round eyes were staring down at him. Once he actually sprang up before he realised that what he had heard was the beating of his own exhausted heart and not the parrot's wings at all. He sank down again realising that he had indeed come to a sorry state. Chandrakant, the proud young Royal Pyjama'd Horse, Chandrakant the unvanquished and unconquer-

able, to shiver and shake like a filly in the dark. It might have been a very humbling experience for almost anybody else, but for Chandrakant it wasn't. His very next thought was that it was a good thing nobody could

see him because it might otherwise have been a very humiliating experience. He sank down again quivering and wondered how he was going to rouse the strength to search for water.

[To be continued]

A MULTINATIONAL MANAGEMENT INSTITUTE A Proposal

Alaba Peters

We are confronting a sinister paradox in international relations: the increasing protectionist posture of national governments and the imperatives of international cooperation and global interdependence. Officials of national governments, while talking in grandiose terms about the importance of the latter, continue to pursue policies of exclusive national self-interest. The industrial countries determined to maintain the preeminence of their economic and military positions, have established a number of institutions aimed at coordinating their economies and technological research to the exclusion of third world countries. The developing nations in return are banding together to protect their raw materials, while the Communist countries remain virtually outside the global market system.

The policies of governments in the present protectionist atmosphere can only lead to serious problems. The growing commitment of the Western industrial nations to nuclear energy, in the absence of a sufficient accumulation of data to ascertain the safety of nuclear plants, is nothing less than the sacrifice of ecological wisdom for short-term economic gains. In the OPEC Middle Eastern countries, the sudden and overwhelming accu-

mulation of petrodollars has resulted in lavish expenditures in capital goods which these economies cannot easily absorb, and a massive importation of skilled labour and foreign managers which will in the long run inevitably put a tremendous strain on the social fabric of these societies. In other third world countries, governments have, understandably, put heavy controls on foreign investments, which is creating an atmosphere not conducive to the development of international trade and investments. It is too obvious that appropriate structures to enhance global economic development could have been worked out long before now if Western policy makers had not been so shortsighted. This state of noncooperation amongst nations cannot continue indefinitely, particularly in the face of such major global problems as the population explosion; depletion of raw materials; pollution, the proliferation of nuclear warheads and a host of other problems. It is obvious that politicians, though they still have the authority to determine the fate of mankind, are not always the best equipped to provide answers to the massive problems that confront us. The decision-making process in our international institutions, such as the United Nations, get bogged down in political rhetoric. The world's managers must come to the forefront and play a more significant role. What we need is managerial continuity in an age of

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political upheaval and confrontation. I am not suggesting that managers subvert the authority of legitimately organized governments, but rather that they show greater initiative and imagination in addressing national and transnational problems.

Management—A Universal Function

There is no precise definition of a manager, because we have not been able to satisfactorily define his or her function. However, Peter Drucker comes closest to an adequate definition when he suggests that the first criterion for identifying people within an organization with management responsibilities "is responsibility for contribution. Function rather than power has to be the distinctive criterion and the organizing principle." Thus, anyone within an organization with responsibilities of planning, organizing, integrating, and measuring the operations of that organization, can rightfully be identified as a manager. The organization can be a business, civic, educational, or social institution; it must have people who are concerned with the functioning of that institution in order to achieve the desired goals in the most efficient way. This makes management a universal function. For, whether the manager is part of a Communist state-owned factory, a nationalised industry, a university, a prison, or a capitalist corporation, he or she is involved in the same process—trying to get the best results with whatever available resources. Already around the world, it is the managers who are keeping institutions functioning. But at present these managers are confined within national political constraints and thus view management problems or questions from their limited national interests. This myopic viewpoint is no longer tenable. And here again I agree with Peter Drucker, because every institution or busi-

ness, no matter how small or nationally oriented, is inevitably affected by conditions around the world. Thus managers must continually bear in mind those factors which shape global conditions as they pursue their management tasks.

Interaction

Interaction, though a grossly overused term, still has a very useful function. It creates a condition where men and women with differing points of view can expose themselves to the opinions of others and, with the right catalysts present, be affected by a wider spectrum of opinions and points of view. In the present rigidity of nationalism, it is impractical to expect that we can successfully bring politicians into an effective condition of interaction. However, we can do this with managers. We can bring managers of different nationalities and cultural backgrounds together periodically so that they can experience through interaction how and why their colleagues approach management tasks in their own specific ways. In our shrinking world, we must be able to understand and evaluate the impingement of the variety of the world's socio-cultural and ideological substructures on national and international institutions. This is an area we are not pursuing effectively. Even within the organization of multinational corporations, there is very limited interaction amongst managers of differing national and cultural backgrounds. Managers from the Western industrial sector are sent out to oversee plants and factories in third world countries. This not only means that the multinational corporations do not benefit from maximum managerial input, it also raises major questions as to how far these corporations intend to go in developing a truly transnational character. The latter question

has important political implications, which will have a bearing on the ability of corporations to survive as transnational institutions in the future. Buckminster Fuller's "World Game", a simulation process, promises a real impact on this transnational future.

A Multinational Management Institute

I am proposing the creation of a multinational management institute, where managers from different nations can spend periods of time collectively studying and analysing specific management case studies of domestic, or transnational impact. The institute should achieve several major objectives.

Through interaction, managers of different national, cultural, and ideological backgrounds, will have an opportunity of learning how their colleagues approach management problems. This is a prerequisite if we are to break through the constraints of ideology and political parochialism.

The institute should initiate the development of managerial tools more relevant to the realities of global change. There is much wrong with the current management controls and measurements being used in determining the direction and goals of business organizations and institutions. These controls are often inadequate or too heavily weighted on the side of superfluous information. But even where relevant and cogent data is available, the ability of managers to make the right decisions are often impeded by socio-cultural prejudices. Nowhere is this more dramatically demonstrated than in the recent confrontation of the oil industry and the Organisation of Petroleum Exporting Countries (OPEC). For decades there had been warning signals from producing countries as to their determination to improve their participation in the oil industry, but the industry seemed

either not to believe the signals or decided to wait and see. Proper long-range planning by industry management would have prevented the crisis. The expropriation of corporate assets and property in many countries and the barrage of accusations from domestic consumers and legislators against multinational corporations demonstrate that management is not coming up with adequate mechanisms to bridge the gap between the corporation and government, and the public at large.

There are other areas where we find important management shortcomings. Productivity in non-domestic operations often suffers because not enough consideration is given to the indigenous cultural and social texture of the host countries.

There is a tendency to assume that management tools appropriate in a United States factory must be suitable for a factory in Nigeria. This is clearly not the case. For management tools must, in the first instance, be derived from the socio-cultural fabric of a people. They are not easily transferable from culture to culture. The multinational management institute will take a transnational approach to the discipline of management.

Within the multinational corporation, there is a need for closer interaction between managers, who are at present separated by rigorous divisional autonomy. The institute should provide the opportunity for national and cultural management interface, which would in the long run benefit the corporation.

Innovations in capitalist business organizations—such as corporate decisions made with worker participation or in codetermination with labour, and worker controlled enterprises—though fascinating and ingenious, have not always turned out to be successful business ventures. There would seem to be a need for managers to study these innova-

tions more closely and develop appropriate management tools that would allow these experiments to demonstrate their full potentiality.

The multinational corporations will have to undergo structural changes in the future. The present divisions of domestic and international operations, with the domestic division giving the character to the corporation and being the main recruiting source of top management, is a relic of the nineteenth century. Structural change will take the combined efforts and ingenuities of many managers from disparate sectors of the corporate organization—perhaps a multinational matrix form of organization.

It is doubtful that the present business and management schools can effectively develop the kind of management programmes that we so badly need; because they are far too limited in scope. They lack a transnational perspective and are too steeped in traditional concepts of management theory. The multinational management institute on the other hand can take a fresh and unprejudiced approach to the study of management.

The Structure of the Institute

The multinational management institute will be a nonprofit organization, completely independent of governments. It should function under the trusteeship of a multinational board of private individuals. A director, preferably someone who has demonstrated origi-

nal thinking in exploring management theory and practice, will be appointed by the board of trustees. The director in conjunction with the trustees should select the faculty. An advisory board will be available to help the institute in its functions.

Since the institute is not conceived as a teaching facility in the traditional sense, the faculty will function essentially in the role of researchers, coordinators of the programmes, and catalysts. The intention is not to teach the art of management, but to motivate candidates to explore alternative approaches to management problems.

Since the institute must be free of government influence, it would be advisable that financing should come from foundations, private donors, corporations, UNESCO, and the United Nations University; and part of the expenses of individual candidates will be borne by their governments or the organizations they are associated with.

Candidates will be selected from different nationalities. I would suggest that candidates be selected on the basis of their function within their organization or government, rather than on their academic credentials. An important criterion should be what a candidate can contribute to the work of the institute. It is my hope that Communist countries, particularly Eastern European countries will be able to participate in conjunction with Western industrial countries and third world countries in the work of the institute.

REVIEWS

The Transformative Vision: Reflections on the Nature and History of Human Expression, by *Jose A. Arguelles*. Berkeley: Shambhala, 1975. 365 pages, \$6.95.

The subject of the history and psychological nature of human expression is a vast one and most books regarding it are rather dull and tedious. Not so with *The Transformative Vision*. It is interesting, lively and genuinely educational. It has clearly been a labour of love for the author whose sincerity, care and thoroughness are self-evident. When a book is written with such a consciousness, that vibration transmits itself very easily to the reader, making him open to the content—the ideal condition, of course, in which the reader can be.

The author's method is based on description and analysis of significant works of art taken mainly from the visual and literary fields—painting, film, poetry, prose. I was very surprised to find virtually no illustrations in the book, but as I read on, the author's explanation for this became clear. "This is essentially a book about inner vision. In order not to detract from, and even to enhance this focus of attention, it was finally decided not to reproduce any of the works of art which are described and spoken of throughout the text."

Although the theme follows a roughly chronological sequence, the book is certainly not written according to the conventions of history—a subject on which Dr. Arguelles has much to say. Yet we do get an interesting picture of the author's attitude to time. Throughout the book are references to the ancient calender of the Mexicans with its heaven and hell periods and to the old Indian concept of the four ages or *yugas*. And in an appendix there is a fascinating calender called "The Ascent of the Jaguar" which the writer describes as a "map of the later Kali Yuga"; it covers the period from A.D. 800 to the present. What is interesting are the events which the author has chosen as significant.

The key to Dr. Arguelles' thesis lies in the understanding of the two central terms which he uses—psyche and techne. Psyche is "that aspect of human behavior that relates to the right cerebral hemisphere; the innate human ability to intuit or to perceive as a whole, that underlies the primary human impulse towards expression. . . . [It is] the feminine archetype of the giver-receiver, the great mother/goddess muse." Techne, on the other hand, "corresponds to the left cerebral hemisphere, and is related to logic, analysis, language, mathematics. It is secondary, the masculine archetype of the power-acquiring shaman/technocrat/artist." Techne is related to body, intellect and matter, psyche to qualities of mind, intuition and spirit. Dr. Arguelles describes his work as the "history of the human psyche and its forms of expression . . . [in the] critical period from the European Renaissance to the present". And although he tries to be global in his approach, the concentration is centred on Europe and the New World.

Right from the beginning we are made aware that the Europeans were the originators of the left hemisphere tyranny, which still exists today. Techne wields apparently invincible power over psyche and "there would be ceaseless struggle were there not a third synergistic force at work, a force greater than the sum of the two primary modes of being. This is the force of an awakened and expanded consciousness . . . the energy of the spirit of the whole." But that comes later.

One of the strongest clues indicating the operation of a transformative process inaugurating the left hemisphere tyranny at the critical early 16th Century juncture is the coincidence of Cortés' amazing conquest of Mexico with Martin Luther's divisive Reformation of the Christian Church. Conquest and Reformation were both completed in 1521. . . . The greatest historical irony is encompassed by the fact that it was on April 21, 1519, Good Friday, that Hernando Cortés set the flag of the Cross on Mexican soil, at a site that was to become the Spanish city of Vera Cruz (True Cross); at the very same time, Martin Luther was writing his epoch-making tract, *Concerning Christian Liberty*. Even more awesome was the fact that Good Friday, April 21, 1519, corresponded in the Mexican Calender to the day Ce Acatl (One Reed), dedicated to the principal god/hero of the ancient Mexicans, Quetzalcoatl. Furthermore, the ancient Mexican seers had prophesied that this day would mark the end of a "heaven" period consisting of thirteen 52-year cycles and the beginning of a major "hell" period consisting of nine 25-year cycles, or 468 years. . . . What was an entry into Hell for the cultures of the New World and ultimately for all non-European peoples, was concurrently the high point of a Renaissance or rebirth among Europeans.

The printing press with its ability to feed the visual appetites of the masses, and the development of the one-point perspective system (perfectly representative of the divisive self-importance of the ego), heralded the decline of the role of psyche in human expression. The Church, which wielded tremendous moral and financial power in those days, played an important part in the ascent of techne. Most artists were directly or indirectly involved with the Church which must have been the largest single patron of the arts. For instance, Raphael was commissioned by Pope Julius II to paint a fresco in the Vatican's Stanza della Segnatura; he called it the "School of Athens" (1509-12). Dr. Arguelles writes: "Perceptually the 'School of Athens' is a full-blown hallucination carefully constructed upon the principle of one-point perspective. . . . The vanishing point . . . is perfectly placed between Aristotle and Plato, the officially sanctioned fountainheads of Western intellectual endeavour. Depicted around them is a fantasy world in which the leading philosophical and literary figures of the ancient Mediterranean culture are assembled." By "ideally depicting pre- and non-Christian symbols within the heart of the Christian establishment—the Vatican", the "School of Athens" catalysed the split within the Church, an event which took place within fifteen years of the

works' completion. But even more significant was this fresco's indication of the formation of the academy: "the tyrannical institution whose main function was to suppress authentic feeling and intuition—psyche—and to standardize values and perceptions".

The academy was quite well established in France and Italy by the seventeenth century and through it a set of axioms for art has been formulated. "In a fundamental sense, the Western eye and brain, under the influence of the academy, was educated away from what the eye is primarily concerned with seeing: light and color"; and thus form took prominence. Not only did the academy turn the artist into a professional but it also encouraged history-painting in which "the subject was exclusively man and his passions". History-painting idealised man in all his egocentricity, and by the eighteenth century there ceased to be, for all practical purposes, a vital tradition of sacred art in Europe. By this time European man had voluntarily accepted history.

Man's acceptance of the absolute uniqueness of historical events is itself a unique event. The consequences are enormous, for they ultimately imply a denial of divine intervention; a negation of archetypes, replaced by the inalienable uniqueness of the individual ego; and a suppression of any consideration other than the cause-and-effect relationships underlying events. It is this insistence on seeing everything as a linear progression of causes and effects that gives a false order to history. . . .

The source of this misunderstanding [of time] is to be found in the orthodox Christian doctrine of the uniqueness of the event of Christ. . . . [In this view] all human activity takes place in unrepeatable units. . . . It breaks from the traditional view, common to most world cultures, that time is cyclic and that human existence is related to certain recurring cosmic patterns. . . .

By the middle of the eighteenth century, creativity had become so "rationally circumscribed" that there was born "the particular European belief that not only is history the superior model for human actions, but the civilisations of Greece and Rome are the greatest of all human historical achievements. In emulating the republic of Greece and the empire of Rome, the Europeans were able to be democratic and imperialistic at the same time; moreover, they could claim that their civilization was also the greatest achievement of the human race, a prejudice that emboldened the Europeans in their adventure of world conquest through the nineteenth century."

However at the same time another force had to be reckoned with, the internal revolt. "The French revolution, like the American, was a change of power favoring the freer expansion of mercantile classes. . . . Their actual effect was to enhance conditions favoring the isolation of the human sense organs from each other and, under the victorious sway of applied reason, from the greater organic functioning of nature as a whole."

The revolutions' effect on art was to provide an increasing mechanisation (through industrialisation) of human expressive means. This led to the creation of a vicious circle where

“the masses, deprived of their own creative initiative, gladly turn to whatever entertainment may be offered. . . . Because the bored person is creatively impotent, the entertainment he craves is always vicarious; being vicarious, it cannot satisfy; being dissatisfied and remaining creatively impotent, the bored person can only seek more entertainment. . . . The media event of today has its roots in [Jacques-Louis] David’s painting of Napoleon crossing the Alps and crowning himself in the Vatican.”

The picture of industrialisation, the rise of technology, and media exploitation—all aspects of the tyranny of techne—is indeed a bleak one and the author spares no effort in driving home his point. But there are refreshing interludes: chapters devoted to some of the genuine visionaries who struggled and suffered and worked in the midst of all the darkness that prevailed. There was Goethe, who wrote:

**All things transitory
But as Symbols are sent
Earth’s insufficiency
Here grows to event:
The Indescribable,
Here it is done:
The Woman-Soul leadeth us
Upward and on!**

And William Blake, that extraordinary poet, painter, and seer, of whom Arguelles says: “If Blake was not the Moses of the religion that is now dawning, he was certainly one of its most singular and powerful prophets—an exemplary heretic dissenting not only critically but creatively from the prevailing technological order.” It was he who made the chilling statement about present times:

**Art degraded, Imagination denied
War govern’d the Nations.**

In the introduction to his epic, “Jerusalem”, Blake said: “Poetry fetter’d Fetters the Human Race. Nations are Destroy’d or Flourish in proportion as Their Poetry, Painting and Music are Destroy’d or Flourish: The primeval state of Man was Wisdom, Art and Science.” In the same poem he urges mankind to awaken from the “sleep of Ulro” and to pass through “Eternal Death” on to “Eternal Life”. He saw “quite simply the unequivocal rôle of the spiritually rooted artist and the corresponding social vision: ‘The Whole Business of Man Is The Arts & All Things Common. No Secrecy in Art.’ ”

But perhaps one of the most significant visionaries was Walt Whitman. In a chapter entitled “Dream Light on the East: Visions of the Seer Poets” (all the chapters have fascinating titles), Dr. Arguelles develops the idea of an internal transformative process which man must undergo before he emerges as an Artist—a process which Whitman called “the passage to India”.

Passage indeed O soul to primal thought,
Not lands and seas alone, thy own clear freshness,
The young maturity of brood and bloom,
To realms of budding bibles.

O soul repressless, I with thee and thee with me,
The circumnavigation of the world begin,
Of man, the voyage of his mind's return.
To reason's early paradise,
Back, back to wisdom's birth, to innocent intuitions,
Again with fair creation.

Really, this book is full of so many good things—too many to discuss here. There are glimpses of the lives and work of many visionaries: Rimbaud, Hesse, Ramakrishna, Poe, Van Gogh, Gauguin (whose "passage to India" led him to Tahiti), Charles Henry, Picasso, Wolfl, D. H. Lawrence, Dane Rudhyar, Ginsberg—the list is quite long and I would simply recommend a close look at this wonderful book.

Dr. Arguelles, himself a visionary, provides us with a truly positive conclusion to his book by advocating the practice of yoga. And "the primary function of the archetypal figures of the shaman and the yogi is not to create art or science, but to heal, to make whole [though I am sure most yogis would say that it is union with the *Divine* which they seek, it is also this at a lower level], to maintain a balance between psyche and techne".

Whatever the internal technologist does is art, for art in these terms is an integration of the open way (psyche, the female) and the way of power (techne, the male). . . . Our journey began with the transformation of mythic experience into the schizophrenic, splintered-world of art, and of the artistic experience into history itself; now through the transformative mind of the visionary artist, we find that history diminishes in the swelling tide of a new myth based on the reunited antipodes of the human mind. The return of the shaman, the descent of the goddess, usher us once again into another beginning. . . . If we carefully follow the path of consciousness, which is the same as the process of individuation in which everything is brought to light, the Road of Life itself, our rebirth into this new world is inevitable. To attain to this rebirth only one thing is required—that we die to our frozen identities—scientist and artist alike. This is the true art, the art of transformation.

It is evident that Dr. Arguelles had not come into contact with any of Sri Aurobindo's writings when he wrote this book, for he would certainly have extended his ideas on transformation as well as those on the duality of being, which he takes in quite a fundamental sense. Related to the latter point, Sri Aurobindo has clarified the duality of *Purusha* and

Prakriti: Purusha being "the conscious soul" or Witness that observes and "supports the play of Prakriti or Nature which is the outer or executive side of Shakti or Conscious-Force which forms and moves the worlds. Prakriti is the Force that acts." Also, Purusha and Prakriti have their higher counterparts in *Ishwara-Shakti*, and transcendently in *Brahman-Maya*. It is customary to refer to Purusha as masculine and to Prakriti as feminine; but this should not in any way be confused with the idea of man and woman. In men and in women there is both the Purusha and the Prakriti. One of the first steps in yoga is to realise the presence of both Purusha and Prakriti, and through the harmony and understanding and use of these two poles of our being, to seek a closer relationship with the Divine until we are ready for the complete union. Since there are infinite ways to seek the Divine, it would surely not seem absolutely necessary to bring psyche and techne together to find the Divine, though their transcendence would certainly help. For instance, the path of *bhakti* has very little to do with techne.

However, this does not in any way detract from the significance of Dr. Arguelles' work. By saying what he has, so candidly and sincerely, he will win the hearts of many people (or should I say, appeal to the psyche in many people) and they will certainly aspire towards the goals that he sets out. José Arguelles is surely one of the champions of the cause of unity, both internal and global—since it is only through internal unity that world unity can be achieved. Everything about *The Transformative Vision* suggests quality, or rather more than that, consciousness.

Angad Vohra

Angad Vohra is a twenty-three year old Indian now residing at the Sri Aurobindo Ashram. After reading for his masters degree in mathematics at Oxford University, he spent a year as an apprentice to a British film director before returning to India. He has written reviews for the journal, Mother India, and during the past year has been working on several film scripts.

Selections from Sri Aurobindo's "Savitri", edited by Mary Aldridge. Pondicherry: Sri Aurobindo Books Distribution Agency, 1975. 253 pages, Rs. 12.50.

Because *Savitri's* character of integrality is so pervasive, a selection of passages is saved from being fragmentary and an actual image of the work's completeness can find form. It can even be suggested that virtually any segment of its 23,803 lines presented in isolation would make evident the poem's immense integrity. The compiler who approaches *Savitri*, then, is happily faced with a work rather like that indicated in a verse of the Upanishads: "This is the complete and That is the complete; subtract the complete from the complete, the complete is the remainder." The complete remains in the inviolate original and resides in the chosen portion. And that fullness is naturally a spiritual and a literary reality.

Given this, the editor has added care, fidelity, conscientiousness, and competency to the selection and presentation. The passages appear in their original sequence, and an intelligent and helpful arrangement of the contents page provides the book, canto, and page reference of each passage in the complete work as well as its page number in *Selections*. It would have been additionally useful if these references had also been indicated throughout the book as page headings. Too, a note explaining that the titles to each selection have been given by the editor and not the poet would have avoided any possible misunderstanding by a reader not familiar with *Savitri*.

But these omissions are small things which surely subtract nothing from the central offering the book represents. Anyone who reads these selections will be drawn naturally to *Savitri*, and thus the volume will have rendered its intended service.

Tatsat

Tatsat, a member of the Sri Aurobindo Ashram, does primarily editorial work but also serves as a librarian. He has recently been helping to coordinate the preparation of a line index to Savitri which will be published soon. Tatsat has contributed reviews and poems regularly to World Union during the last two years.

FOCUS

THE NEXT FUTURE Progress Announcement

Since the editorial and "Focus" announcements in the December 1975 *World Union*, developments in planning World Union International's fifth triennial conference, *The Next Future*, for 8, 9 and 10 January 1977, have reached the stage of a second sharing. There are three aspects: explanation of the structure and process of the conference; listing seminar invitation acceptances to date; and an indication of the goal of the conference.

The two major parts of the conference are the plenary (or general) sessions and the seminar sessions. Plenary sessions will include an expected several hundred persons—World Union members and others—who will participate in the opening and closing sessions of the conference that will initiate the gathering and integrate what is achieved during the three days. These participants need not be invited, for the plenary sessions are open to all who register for the conference. Within the plenary group will be a small number of about thirty-five persons, invited from various fields of study and work from several countries. These invitees will constitute the seminar, whose sessions will be the pulse of the conference. Sitting around the seminar group in a large circle, the general or plenary group will be able to observe seminar discussions at will, and to participate in the exchanges at certain intervals.

There will be four seminar sessions, in accord with the four movements of the conference already described in the December announcements: *service, perfection in work*—e.g., health care and medicine, technology, agriculture; *harmony, order*—e.g., art, town planning, ethics; *power, effectuation*—e.g., politics, communications, armaments; *knowledge, development of consciousness*—e.g., pure science, philosophy of history, yoga. First the seminar group may explore the next future of service and perfection in work; then the harmony and order of such service; then the power, the effectuation of a harmonised work; finally, in a wide integration, the knowledge and development of consciousness involved in and evolving from an ordered and effective service. This describes, of course, just one of the many possible ways in which the discussion might flow. Each of the four spheres will provide a natural opportunity to deal with the fields that it expresses. In harmony and order, for instance, ecology, aesthetics, the sociological sciences, management, physical culture, general systems theory, design science, and law would be likely to come into the play of discussion.

The word "discussion" is used in its genuine sense. That is because any views which would require speeches or reading of papers will be solicited, reprinted, and distributed by mail so participants can assimilate them before the conference. No papers or lectures will be

presented in the seminar. Additional pre-sent materials—biographical data of each participant, relevant books written by participants or others, and an interdisciplinary background paper prepared by the conference organisers—will allow members of the seminar to be thoroughly informed of the setting and the mental landscapes of their colleagues-to-be, so that the seminar may begin at the level of genuine discussion and conversational development, leading to the possibilities of collective discoveries. Also, free time will give opportunities for more intimate conversation and contemplation that can only benefit the sessions.

These are the persons who have thus far accepted invitations to the seminar and are coming, or working towards coming:

Dr. Malcom Adesheshiah—Madras, India: vice-chancellor, University of Madras; former deputy director general, UNESCO.

Patrick N. Armstrong—London, England: general secretary, Parliamentary Group for World Government.

Mary Bailey—New York City, U.S.A.: president, Lucis Trust.

Dr. Robert Bainbridge—Los Gatos, California, U.S.A.: professor of elementary education, San Jose State University.

Dr. Kathryn Breese-Whiting—La Mesa, California, U.S.A.: president, The Phoenix Institute.

Dr. Sripati Chandrasekhar—Chidambaram, India: vice-chancellor and president, Annamalai University; demographer and economist.

Barbara Dailey—Princeton, New Jersey, U.S.A.: associated with Wainwright House.

C. V. Devan Nair—Singapore: secretary-general, Singapore National Trades Union Congress.

Dr. Richard A. Falk—Princeton, New Jersey, U.S.A.: Alfred G. Milbank Professor of International Law and Practice, Princeton University; formerly member, U.S. team, World Order Models Project, Institute for World Order, Inc.

Dr. Clayton E. Jensen—Cape Coral, Florida, U.S.A.: retired deputy associate administrator, National Oceanic and Atmospheric Administration.

Anthony J. N. Judge—Brussels, Belgium: assistant secretary-general, Union of International Associations.

Dr. Gordon Kaufman—Cambridge, Massachusetts, U.S.A.: professor of theology, Harvard University Divinity School.

Donald Keys—New York City, U.S.A.: director, International Center of Integrated Studies; registrar, Planetary Citizens.

Dr. Prem Kirpal—New Delhi, India: president, Institute of Cultural Relations and Development Studies.

Shirley Kort—Vancouver, Canada: social worker.

Sol Kort—Vancouver, Canada: director, Humanities and Sciences Programs, Division of Continuing Education, University of British Columbia.

Dr. Ervin Laszlo—Ganeseo, New York, U.S.A.: professor of philosophy, State University of New York; project director, Goals for a Global Society, the Club of Rome.

Col. P. N. Luthra—New Delhi, India: chief administrator of the Bangladesh refugee relief operation, 1971-72; retired additional secretary of social welfare, Ministry of Education.

Premchand Malhotra—New Delhi, India: convener, Gandhian Study Group.
 Milana de Beauvoir Mascarenhas—Palo Alto, California, U.S.A.: educationist.
 Dr. N. R. Madhava Menon—Pondicherry, India: principal, Government Law College.
 R. K. Nehru—Allahabad, India: diplomat; world federal activist.
 Dr. Aster Patel—Pondicherry, India: teacher of philosophy.
 Dr. Nagendra Singh—New Delhi, India: judge, the International Court of Justice.
 Robert A. Smith, III—Huntsville, Alabama, U.S.A.: organisational behavior analyst, National Aeronautics and Space Administration.
 Julius Stulman—New York City, U.S.A.: president, World Institute Council.
 John White—Cheshire, Connecticut, U.S.A.: writer; consciousness researcher; associate editor, *Human Dimensions* and *Psychic* magazines.
 Dr. Henry Winthrop—Tampa, Florida, U.S.A.: professor of interdisciplinary social sciences, University of South Florida.

Correspondence is proceeding with other invitees from the above mentioned countries and also Brazil, Egypt, West Germany, Iran, Israel, Japan, and Norway. We will be able to announce additional expected participants soon.

It is common to formulate specific goals for conferences and attempt to guide conferees to them. But the emerging complexion of seminar participants makes it clear that most of these persons will be meeting for the first time from a wide arc of interests and localities. The natural process toward a goal would be an investigative and educative one: that is, each member of the seminar feeling out his or her perception of the body of the next future in the poise, say, of new communities' labour and welfare, the theology of education, psychological myth, or a truly administrative economics; then the educative process of members sharing, evolving, synthesising their perceptions. We can consider the most abundant expression of that process the goal of the conference.

WORLD UNION PROGRESS ANNOUNCEMENT

Every organisation grows or decays; it cannot stand still.

We are living on an evolutionary planet of constant progression, though certainly that movement is not in a straight line. In our self-development there are periods of setbacks or stepping "down" to prepare for an ascent higher than the last stage reached. There are times in the lives of some when their will sleeps and they decay, but an organisation may decay, dissolve, and even disappear unless it is full of the care to grow and evolve continuously, to become qualitatively better. We are happy to report the World Union movement is expanding in awareness of its central task, the realisation of human unity on a spiritual foundation; in its effective communication of this ideal; and in its growing multiforms of activities initiated by the International Centre, other centres, and members.

Bangalore Centre offers a high example of this development. With a constantly and rapidly growing membership the centre has, for example, been able to attract highly regarded,

resourceful speakers to discuss quite original applications of unity in various fields. Of course, maintenance activities such as working committee and general body meetings, annual election of office bearers and working committee members, and annual reports and statements of accounts are all regularly done to keep the centre informed and in order.

Markedly successful seminars have often been organised by the centre outside Bangalore. Bangalore Centre held the first national convention of the World Union centres of India in June 1975. It proved to be such a seminal event that it resulted in an historic decision to organise the World Union India Centre. (Information regarding this was published in the May 1976 "Focus".) Bangalore members enthusiastically support the World Union India Centre, whose first president is their own former one, Prof. N. S. Govinda Rao, and have undertaken the vast and crucial task of working for the national integration of India. No true world unity is possible until most of the nations of the world are able to establish unity within themselves. But the integration and unity of India has a special significance for the world. Many sages, saints and prophets, beginning from the time of the Vedic period, have dreamt of human unity; and some foresaw India playing a leading role in bringing about a reorganisation of the whole earth life on a spiritual basis and in establishing world integration.

Therefore the work which the World Union India Centre has begun is not only of Indian importance, but will strengthen the forces which are shaping the future of the human race for realising the centuries' dream of unity. Regarding the laudable performance of the Bangalore Centre up to this point, and the enthusiasm and aspiration for work of this nature shown by their members, we feel confident they will find ways and means, through contacting and working with individuals and governmental and non-governmental organisations in India, for making their work of national integration effective. It will not merely be the duty but the excellent privilege of every member of World Union in India to lend support in whatever way possible to this work of the unity of India – a very urgent task if India is to fulfil her destiny of putting her spiritual heritage at the disposal of the world and giving a lead in the great march of humanity towards a spiritual age. There are unmistakable signs that humanity is already preparing to qualify itself for entry into such a spiritual age, after its experiences in the long period of materialism and its unsatisfying state. From this aspect, the work of the World Union India Centre promises to be of great importance.

World Union centres in West Bengal have set a gratifying example in the conduct of the work. Some of the members, particularly Sri Samar Basu, coordinator of World Union's Eastern Region, have been so interested in the educational problems facing the society that they have organised Sri Aurobindo Siksha Samsad, an association for propagating a philosophy of education and for implementing it in the West Bengal situation. It promotes an education directed toward human unity and cultural harmony based on an integral growth into spiritual awareness according to the ideals disclosed by Sri Aurobindo. This samsad of World Union Eastern Region holds seminars and conferences with the cooperation of educationists such as M. K. Bannerjee. They have published a notable amount of educational literature which includes guidelines not only for schools in the area, but specifically for teachers, students, and guardians. Through all this they help to create an atmosphere which

suggests that the new age demands rethinking of the principles and methods of education; in the present tempo of change, in all fields of life, what was valid yesterday does not remain valid today.

These centres, which have formed a larger aggregate termed the West Bengal Regional Centre, have proposed to hold the second national convention of World Union centres of India sometime during the latter half of 1978 in Calcutta. Their energy is contagious and slowly but steadily the World Union movement has been firmly founded in West Bengal.

Contributions to this foundation have, of course, included the regular monthly meetings held by most centres, the conducting of study classes, the organisation of women's and youth's participation in the movement, and the holding of annual elections of office bearers and committees—for these basics make the rest possible. Through the resourceful ability of Sri Samar Basu to inspire these centres, they have expanded their memberships in accordance with the expansion of their activities. Their interest in the affairs of the people they live among is reflected in regular and frequent seminars to which they invite local speaker-participants on local themes relevant to the aims of World Union.

We are happy to report that five of the World Union centres of West Bengal—Calcutta, Baranagar, Alambazar, Barasat and Sodepur—held a joint meeting at Alambazar Centre on 6 July 1975 and unanimously decided to start a national society on culture and economics based on the ideal of human unity under the auspices of World Union International Centre. It will be a spiritual, nonprofit, nonpolitical, charitable and voluntary organisation. After several subsequent meetings, the memorandum of association and rules and regulations are ready for registration with the government, and that process is under way now. Their name is World Union Cultural and Economic Council. Readers will be happy to note that the organisers, with Sri Chunilal Goswami, secretary of the Baranagar Centre, in the lead, intend to commence a variety of activities in the cultural and economic fields. The point of the work is to demonstrate the ideals of World Union by practical action in the economic and cultural fields. We wish Sri Goswami and his colleagues full success and hope the work will be carried on in an atmosphere of harmony and unity among all who join in it: for, service to the ideals of World Union imply taking care that harmony and peace remain the dominant forces in all stages of activities leading toward achievement of this large project.

Centres in Bombay, particularly those of Sion and Khar, are working very actively. They are introducing new members to the movement and lending support to the journal. At present all signs indicate that World Union, as a movement, will become firmly established in Bombay; and further, that Bombay centres will be able to undertake wider activities in extension of the work.

At this stage of the World Union work, we should realise that unity must begin with ourselves, with establishing harmonious relations in our family, and with friends, colleagues, co-workers, neighbours, and with people we choicelessly contact in daily life. If we fail to develop right human relations during everyday life, the impact we make on others will prove ineffective. It must be intimately remembered that, in its very nature, a movement of world union demands our unreserved effort to live the reality of human unity in our own local days.

There are sure signs that the World Union movement will germinate and take root in other places also. However, we cannot ignore the fact that though there are about forty-five World Union centres in India, many of them do not pull their own weight. I think the workers of these centres should continue their efforts with faith, patience and an energetic perseverance trying to expand centre activities so others can be affected through their work. On the whole, World Union shows signs of an onward march.

In establishing and developing activities, World Union centres and members should feel inspired and encouraged by world events which show unmistakable trends toward unity. All nations are today compelled by world conditions to come together in international conferences and gatherings to seek solutions to the global problems of food, ecology, health, trade, natural resources, economics, commodity prices, the transfer of technology by highly industrialised countries to undeveloped nations, international unemployment and workers' conditions, women's rights, the care of children, rules to govern the use of the sea and its resources, and many others. These meetings are attended mostly by governmental delegations and often are convened by the United Nations or its agencies, and delegations of non-governmental organisations often participate. The problems discussed are seen as world needs. They more and more imply a radical narrowing of the gap between rich and poor countries in order to dissolve poverty and its diseases. Yet, national selfishness frequently dominates discussions. Slowly but increasingly, just attitudes get a hearing in these gatherings, steps are being taken towards solutions of the problems, however hesitantly, and one finds that the old mental and vital structures of selfishness, competition, domination, exploitation and displays of strength and power are evidently receding. In this process, international committees are being appointed to solve planetary problems and, although with seeming imperceptibility, even the powerful nations have realised the present economic order has to change. Consequently, national states have begun the process of parting with a fraction of their sovereignty to these international "committees" which are establishing principles and procedures for fair solutions.

The United Nations International Convention of Trade and Development held at Nairobi clarified and crystallised the undeveloped countries' need to move rapidly towards mastery of their own resources and appropriate industrialisation. The World Health Conference at Geneva concluded that human longevity alone is not sufficient; there must be improvement in the quality of life.

If one sees below the surface of such events, all these international gatherings and committees are heralding some kind of future agency with a world authority to move against problems in its field on the basis of a commonly consented international law. Mankind is vigorously applying itself to creating a world order which will do justice to all, banish hunger, poverty and its diseases from the earth—and is therefore creating organs, agencies and patterns of action which will bring about the needed changes.

A cynic might legitimately point at many obstacles flung into the process by vested interests and entrenched powers, because it is true that many blockages have risen. But it is

equally true that they have risen precisely in order to be passed: the evolutionary process of life progresses in that way. That is, all difficulties are ultimately opportunities for the growth of the human race.

Meanwhile, world consciousness is growing, the sense of world community is becoming stronger and the number of people who aspire to have a just world order is increasing. Above all, world public opinion is visibly gathering strength, which will compel national governments to finally come to terms with some kind of just world order. We are moving towards, simply, the fulfilment of the ideal of human unity. May this inspire and encourage all centres and members of World Union to work with greater enthusiasm and lend their support to the emerging new world order.

Present global events point to the fulfilment of world union by or before, perhaps, the close of the century. While thinking about the solutions to contemporary world problems, many writers, thinkers and scientists virtually everywhere talk in terms of what must happen by or before the close of the century. It occurs to them to think in those terms because the world is destined to be very different at the advent of the twenty-first century from what it is today. The principles which will govern human institutions, human relations, and relations between nations in the year 2000 will be new principles. Let us continue this massive march forward with full faith that we are going towards the true goal of human unity in a world union of free and independent nations.

ORGANISATIONAL ACTIVITY

World Union Centres

Alambazar Their monthly meeting of 25 April centred around the development of the new cultural and economic council mentioned earlier in this "Focus". An example of how fast the work on this project is proceeding is their decision to open a branch of the council near Alambazar Centre.

Baranagar Harold J. Laski, Wendell Wilkie, Bertrand Russell, Paul Richard, Raja Ram Mohun Roy, Swami Vivekananda, Rabindranath Tagore and Sri Aurobindo all were referred to in a talk by Sri Chunilal Goswami on world government and the means to reach it. The best way to form a world government was a very informative part of the talk which held listeners for the unusual length of an hour. This was the major event of the April meeting on the 10th.

Konnagar The Bengali New Year was the occasion for the children of Konnagar Centre to present a cultural programme on 18 April, which focused on the staging of a lyric-drama called "The New Sun". It projected the impact of Sri Aurobindo's influence on these children. Their programme also included a silent, visual presentation of Africa slowly waking to its divine consciousness in a world moving toward unity rich in diversity. The full programme consumed three hours, its dances, recitations, and paintings the condensation of regular Sunday morning children's meetings since February.

Nanjangud Their meetings have become interesting enough to the *Deccan Herald* (the most widely read English newspaper in Karnataka) to attract its reports in detail, along

with other newspapers. The meeting of April 25th featured Dr. M. N. Doreswamy, a Mysore ophthalmologist, who spoke about the preventatives of blindness. Blindness is now the fate of 6,000,000 people in India. His talk was congruent with the theme of World Health Day this year, "Foresight Prevents Blindness".

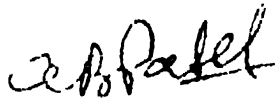
It is claimed, he said, that two-thirds of India's blind are unnecessarily so; which is why Dr. Doreswamy intended to spend his energy that evening on prevention—a refreshing quality in an ophthalmic surgeon, for surgeons generally restrict their interests to treatment. During the progress of a rather technical discourse, he said we cannot appreciate just how much blind people cherish self-sufficiency, which is a point anyone in contact with blind persons can sensitively apply.

North Calcutta In addition to the children's and students' recitations and oratory, and the presentation of a new painting and reading of new poems, an action was decided upon in the general discussion which takes the previous meeting's considerations a stage further: a poet said to be of some eminence, Sri Purnendu Prasad Bhattacharjee (who is also chairman of Barangore Centre) will be invited to meet with North Calcutta members to discuss the problems and solutions of the future literature and the appropriateness of convening a wider literary gathering soon. This convention may begin, under North Calcutta Centre's auspices, a World Union Bengali journal of literature.

The meeting's inaugural speech of Sri T. K. Sinha made an important point: since World Union is based on Spirit, its nature is not to radiate an ideal in one sphere but in all environments and creations which are each inhabited by the power of truth and unity. Consequently, cells of World Union in education, arts, economics, politics, et al., would be fruitful explorations. Smt. Anita Bose extended this point in one field, saying she found the spirit of education in the evolution of the soul. This means that those who are truly educated in the values of the soul, she declared, will be capable of instrumenting love, light and ananda upon all obstacles, of bringing external reality to the fields of these qualities and powers.

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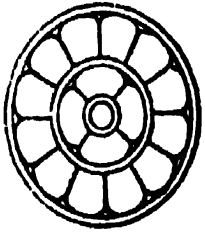
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—Sri Aurobindo



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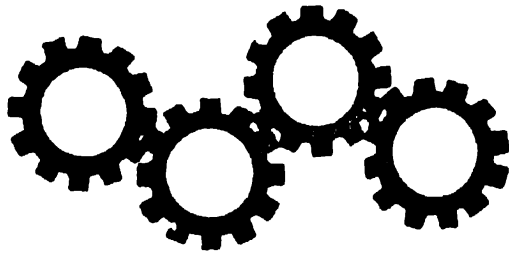
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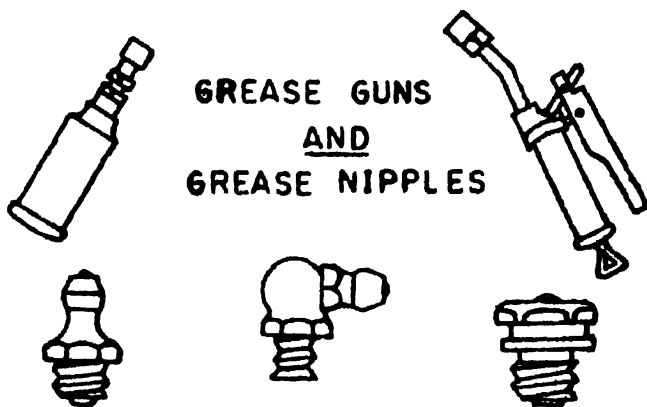
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EDITORIAL

Miracles

A university in south India has instituted a faculty for the scientific assessment of "miracles". The ostensible object is laudable. It is to promote in the public mind a capacity of greater discrimination and judgment and a more scientific outlook so that superstition and jugglery may be exposed and the rational mode of life made more common. Thus far, quite an acceptable intention. But when in the same breath it is said that the miracles commonly performed by some "god-men" mostly concern production of things smaller than the fist, there is an implied suggestion that it is all merely magic and sleight of hand. Such an attitude is a rather unscientific conviction in advance.

The whole question relates to the province of what is normally called the occult. The occult is that which is not patent to the physical senses. There are realms of existence which are beyond the ken of physical observation but which are, nonetheless, true. The physical or material is not the only plane of existence. We have a life plane differently constituted from the material and a mind plane still differently composed. The feelings and impulses at the life level and the thought-movements and ideas at the mental level are not grossly perceptible but they are certainly palpable in a subtler way. And there are other planes of existence beyond the life or vital plane and the mental plane. Ancient tradition speaks of seven planes, each order of existence having its own principle and law. All these planes are interconnected as we can easily observe and experience in ourselves. Our physical body, our life-force, our emotions, our mind, and our soul-movements all intermingle and form parts of a whole, grades of a single being, levels of one consciousness.

The law of each plane, and of each world of a plane, governs its life. As long as occurrences are according to the prevailing law of the Earth plane, we regard them as natural. But if the law or working of another plane is brought into play here, we view resultant occurrences as unnatural or as miracles. And this operation of a different law is possible because the whole universe is a single system with interpenetrating grades of existence. For example, we can exert a mental will, impose the law of the mental plane, and thereby set aside the normal working of the physical law of cause and effect. Similarly, a spiritual force, a force of the soul, can be made to supersede the action of the material or mental forces in the world.

The question is, how is one to test the movements of a higher plane with the methods that are proper to a lower—i.e., the physical—plane? How can one test with physical instruments the quality of love or compassion flowing from the soul? One becomes aware of expressions of the soul in another person when something deeper and subtler than the physical within oneself becomes aware of those vibrations. That is to say, the means of testing or becoming aware must correspond to the quality and level of what is tested.

Any committee formed to test the legitimacy of miraculous phenomena must consist of those whose subtler faculties are developed enough to perceive the subtler order of things. Only a yogin can test and testify to the reality of yogic phenomena, not a professor of logic or a doctor of medicine whose province is quite different.

That apart, how can the "miracle" of things being produced from "nowhere" be explained? For those who are aware of the existence of worlds other than the terrestrial, there is no difficulty in following the process. Above our physical world, there is a subtle-physical world with its own subtle substance, movements, and vibrations. It is possible for one who knows the science to assemble this subtle matter in the desired form and precipitate it on the material plane. This process is called materialisation. Similarly it is possible to break up or de-materialise an object, making it disappear from the physical scene. These are processes that are well known and accepted as normal in occult science. There are also other methods of producing things without physical causes, but we need not here enter into them.

The existence of powers which exceed the laws that govern the operations of our material world has been recognised from ancient times all over the world. Patanjali, in his yoga sutras, speaks of eight such powers which can be made effective by yogic development, by mantra, by medicinal stimulation. The phenomenon of levitation, overpassing the law of gravitation, has been witnessed by many. It is on record that during the time when Sri Aurobindo was imprisoned on false charges in the Alipore jail, some fellow prisoners saw him sitting a few inches above the ground. He himself had not noticed it till it was pointed out to him. It is indeed possible by changing the rhythm of things in oneself and by suspension of certain operations of the life-force to make oneself so light that one may rise in the air, walk on water, and so on. This is not imagination, magic, or hearsay, but a positive and verifiable phenomenon testifying to the immense possibilities open to man if only he would consent to expand his consciousness, to break out of his self-imposed barriers of the physical mind.

Of course this is not to say that every person who can effect these "miracles" is a god or a supra-human being. These things usually have nothing to do with spirituality. Such capacities can be acquired even by those who do not believe in God through the science of the occult.

M. P. P.

HOLISTIC SYSTEMS ANALYSIS: TOWARD A SCIENTIFIC UNDERSTANDING OF STRUCTURAL INTEGRATION

Richard P. Ingrasci

For man is an energy field, as the earth and its outward envelope of forces is an energy field. How well a man can exist and function depends on whether the field which is himself, his psychological and physical personality, is reinforced or disorganized by the field of gravity.¹

Ida P. Rolf

The above statement represents the core of a scientific truth that I believe will soon result in Structural Integration (SI) being recognized as a major scientific breakthrough. This intuition is based on the fact that the most comprehensive models of the universe emerging from the "new physics" (based on Einstein's vision of a unified field theory) are entirely consistent with the fundamental principles of SI. A major scientific revolution based on this new scientific paradigm is already well under way because the new paradigm can better

1. All quotes by Ida Rolf are taken from, "Gravity: An Unexplored Factor in a More Human Use of Human Beings", *Systematics* 1, no. 1 (1963).

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explain what is presently unexplainable using the old models—e.g., the nature of consciousness, and so-called paranormal phenomena such as clairvoyance, psychokinesis, telepathy, psychic healing, precognition, and astral projection.

I will briefly list some of the general characteristics of this emerging model of reality, those which I consider especially relevant to SI.

1. All things are interconnected (e.g., Mach's principle states that the mass of a single particle is determined by the mass of the entire universe).
2. Our normal perception of reality is a composite of an indefinite number of universes in which we coexist.
3. All of space-time is constructed by consciousness.
4. Gravity is the master field; there is a hierarchy of finite-range gravitational fields, one for each major scale of organization of matter in space-time. (SI is particularly concerned with self-organizing biogravitational fields, which control events on the scale of 10^{-4} cm, the scale of organization of biological processes.)
5. Time and space are not absolute, but are distorted by gravitational fields (according to Einstein's theory of general relativity, the rate of time flow and the size of space depend on the strength of the gravitational field).
6. Matter is gravitationally trapped light ($E=mc^2$); self-organizing fields generate matter; biogravitational fields organize living matter.
7. Gravity can act at speeds greater than the velocity of light (instantaneously—the "paranormal channel") as well as less than the velocity of light (normal sensory perception).
8. Everything is living; there is consciousness in everything.
9. Tension and compression are inseparable and coordinate functions of all structural systems; they are coexistent and complementary behaviors in nature. Tension is continuous, comprehensive, attractive, and gravitational. Compression is discontinuous, local, temporary, and divisive. Gravity is the tensional principle of the universe.
10. The universe is like a hologram—every part contains the whole.

From this brief overview, we see that universes consist of vibrating energy fields that together form one unified whole—that is, they are completely interconnected and intercommunicating. We see that gravity and consciousness are inextricably related (perhaps mutually causal?), and that a deeper understanding of the relationship between living systems and the self-organizing biogravitational fields associated with them might well result in the human species transforming itself to a higher state of consciousness.² So, my intuition is that SI is a tool for systematically transforming the physical structure of man into a more

2. Harold Saxton Burr, *The Fields of Life* (New York: Ballentine Books, 1973). See also, Lawrence Blair, *Rhythms of Visions: The Changing Patterns of Belief* (New York: Schocken, 1976); and, Oliver L. Reiser, *Cosmic Humanism and World Unity* (New York: Gordon & Breach, 1976).

harmonious relationship with the gravitational fields that envelope him, and that ultimately this results in an evolutionary transformation of human consciousness. More precisely, SI facilitates human evolution (which is the *only* game in town!).

In terms of general systems theory, life is a manifestation of the general principle in nature called syntropy (or negative entropy). Syntropy is the tendency to reach higher and higher levels of organization, harmony, and order. Entropy, the opposite principle, is the tendency of organized forms to gradually disintegrate into lower and lower forms of organization. Living organisms are self-organizing, open systems—that is, they maintain their highly ordered spatial structure by a continuous input and output of energy and information. When a living system comes to rest there is an increase in randomness; thus function keeps the living system in its low entropy state (in thermodynamics, we say that an open system reaches its energy minimum—that is, its greatest stability—by working). Living systems give out energy as they improve and form more orderly, stable structures (a structure is a self-stabilizing pattern; structures are *not* things; structures are event constellations). Growth often takes the form of *self-structuring hierarchical shifts* in which unstable, conflicting subsystems reintegrate at a higher level of orderliness via structural transformations (e.g., one-celled organisms evolving into multicellular organisms).

Man is a living system—he is a synergetic synthesis of cells, tissues, and organs, the whole of which is greater than the sum of its parts. He is *not* only the atoms or molecules that make up his physical body, but also the structural relationships of these parts which are organized by his biogravitational field. (Ida Rolf: “An understanding of the integrative factor in man implies an awareness of the vital urgency of relationship. It is through the creation of appropriate *relationship* in three dimensional space that a man may be freed to a higher and more truly human functioning.”)³

From the systems point of view, the goal of SI is seen to be to increase order and harmony in the human body (and thereby the person as a whole) by transforming the relationships among all the parts of the body through the manipulation of the deep fascia. A random, disorganized body may be “stuck” (at rest) in a variety of ways (e.g., intrinsic-extrinsic musculature imbalances, pelvic rotation, flexor-extensor imbalances, etc.), and these imbalances are always reflected throughout the whole system. A useful analogy is this: A 10-watt bulb doesn’t provide very much light because the photons that are emitted are out of phase with each other, which results in *destructive* interference. If, however, we were to take the same number of photons and make it possible for them to be emitted in phase with each other, creating *constructive* interference (this is called a laser), then we would generate more energy than on the surface of the sun! Random bodies are out of phase with gravity and therefore torn down by it; structurally integrated bodies are in phase (or resonating) with gravity, and therefore supported by it.

This last statement is a hypothesis that could be tested empirically. Now, I am fortu-

3. See also, William A. Tiller, “Energy Fields and the Human Body” (Paper delivered at the A.R.E. Medical Symposium, Mind-Body Relationships in the Disease Process, Phoenix, Arizona, January 1972).

nate to be working with one of the leading cosmologists forging the new model of reality described previously. His name is Ben Bentov; he is a gifted inventor and he has developed an instrument (he calls it a "transcendometer") which is capable of measuring the micro-motion of the body as it is reflected in the vibration of the aura surrounding the body. He measures the electrostatic field flux with this antenna-like sensor (no bodily electrodes) that he places approximately six inches away from the body (the aura is believed to be a reflection of the biogravitational field). Bentov originally designed this instrument to serve as a "meditation meter" for determining physical correlates to the "transcendent" state of consciousness. His research with Transcendental Meditation has resulted in some truly remarkable discoveries that are clearly relevant to SI.⁴

What Bentov has discovered is that the human body is a musical instrument—it is constantly vibrating and emitting "sounds". He has discovered five major oscillators in the body (heart, spinal column and skull, third and fourth ventricles of the brain, cortex, and an electromagnetic field around the head) that can be rhythmically entrained by inductive resonance. Resonance is another general principle found in nature. For example, if two grandfather clocks are connected by a wooden board and one of them happens to be ticking slightly faster than the other, then very shortly they will both be synchronously ticking at the higher frequency. Higher frequency oscillators entrain lower frequency oscillators so that they resonate (vibrate in phase) at the higher frequency.

This is not the place for a detailed description of Bentov's research, but let us briefly consider the most powerful oscillator in the body, the heart. Each time the heart beats, a pressure pulse is transmitted through the aorta. This pressure wave is partially reflected back towards the heart when it hits the bifurcation of the aorta. In a "normal" state of consciousness, this oscillator is not "tuned"—that is, the pressure wave from the next heartbeat and the returning pressure wave destructively interfere with each other, resulting in a loss of energy from the body as heat. However, in deep meditation, a feedback loop develops (this involves breathing and muscle tension) which results in the next heartbeat occurring exactly as the returning wave reaches the heart—that is, a constructive interference is set up (the waves reinforce each other) and no energy is lost. A standing wave of 7 cycles per second (cps) is created in the aorta. This is a remarkable scientific fact.

When the heart oscillator and the other oscillators are all resonating together, the electromagnetic field surrounding the head is entrained by the earth's electromagnetic field, which oscillates at 7.35 cps (remember that gravity is the basis of all energy fields), so that the individual is resonating with the planet, which is resonating with the sun, which is resonating with the galaxy . . . etc. This state of consciousness is sometimes called transcendence.

The body is a musical instrument with five major oscillators. When the body is "tuned", the biogravitational field of the body is locked into and reinforced by the gravitational field of the earth. Higher states of consciousness can be viewed, then, as a resonance with the

4. Much of this is further detailed in a forthcoming book by Ben Bentov entitled, *Stalking the Wild Pendulum*.

higher order systems of nature. And gravity is the instantaneous (paranormal) communication channel, our direct link to the Whole.

One other interesting discovery that Bentov has made is that when these oscillators of the body are all resonating, the vibrating of the sensory cortex of the brain creates a piezo-electric current (an electrical current caused by pressure on the neurons) whose path follows the sensory homunculus (toes, knees, pelvis, spine, heart, throat, top of head, and forehead) and eventually stimulates one of the pleasure centers of the brain (bliss consciousness!). He hypothesizes that this is the physical basis for the "raising of the Kundalini energy" which is described as starting in the toes and moving through the seven chakras (energy centers) of the body. There have been many reports of people experiencing intense heat and energy over the "third eye" or crown chakra during Rolfing sessions, and Valerie Hunt's latest research includes electronic monitoring of energy changes in the chakras, with a special high frequency (20,000 Hz) electrode over the crown chakra.

It is probable that meditation is only one of many tools that produces a refinement of the nervous system in the manner I have just described. My intuition is that this is also what is happening in Rolfing. In other words, one would predict that SI produces more order in the body which would be reflected in the greater resonance of these physiological oscillators. This, of course, can be measured using the transcendometer and similar instruments, and this is exactly what we intend to do (Rolf, Bentov, and I are meeting to design a research protocol for several studies along this line). Our work will complement Valery Hunt's research measuring changes in the aura using Kirlian photography and EMG recordings; hopefully a more complete scientific understanding of SI will emerge.

But we cannot understand or explain the changes that we see and experience in SI using any of our old scientific models. It is imperative that we develop an awareness of the universe as a tensegrity structure, for only then, as Ron Kirkby has pointed out, can we begin to scientifically explain how gravity supports the body and lifts it up.

The Universe islands its spherical compression aggregates and coheres the whole exclusively with tension; discontinuous compression and continuous tension: I call this tensional integrity of the Universe *tensegrity*. . . . Tension has been secondary in all man's building (and thinking) and compression has been primary, for he has always thought of compression as solid. Compression is that "realistic hard core" that men love to refer to, and its reality was universal, ergo comprehensive. Man must now break out of that habit and learn to play at nature's game where tension is primary and where tension explains the coherence of the whole.⁵

A tensegrity structure is a structure the shape of which is guaranteed by the tensional

5. Ron Kirkby, "The Probable Reality Behind Structural Integration", unpublished manuscript.

behaviors of the system, and not by the compressional behaviors. The human body is a tensegrity structure—the “soft” supporting tissues (dense and loose connective tissues) form a continuous tensional network, and as such are the principal structural elements of the body. The bones and cartilage form local islands of compression which keep the soft tissues from collapsing.

This is not what any of the anatomy books tell us, but clearly this is what’s so. If you simply play with a movable tensegrity structure like the vector equilibrium (every Rolfer should do this), it immediately becomes clear that changing the tension in the system asymmetrically results in bends and rotations throughout the system. Also, the vector equilibrium assumes its maximum height when tension is evenly balanced throughout the entire tensional net. In the body this means that bends and rotations are the result of imbalances in the tensional (fascial) network.⁶ Therefore, restoring tensional balance in the fascial network will result in a straightening and lengthening of the body.

Ron Kirkby’s hypothesis is that “gravity supports the body by setting the correct tensions within the upright man”. I believe that this is only partially true. Kirkby does not seem to be aware of the fact that there are different kinds of finite-range gravitational fields. The earth’s gravitational field does not set or determine the tensions in the body, it only interacts with the body’s own biogravitational field either constructively or destructively—that is, depending on the tensional balance in the body set by its own biogravitational field, the earth’s gravitational field either reinforces or supports the body, or tears it down (destructive interference).

My hypothesis is that there are a number of important variables that contribute to setting the tensions in the fascial network. Kirkby mentions one of them—muscle tone. My intuition is that the most important tensional variable is the collagen molecules that are present in the intercellular substance of the fascia. My guess is that the tensile strength of the collagen molecule probably changes when a sufficiently strong force (perhaps one generated mutually by the Rolfer and the Rolfee) is applied to transform the steric conformation (spatial relationships) of the molecule. The body *is* a plastic medium.⁷ These structural transformations at the molecular level are possibly self-structuring hierarchical shifts which result in a higher degree of order in the whole body. This is a more stable structure, which might account for why changes produced by SI are permanent.

Of course, at this point most of these ideas are just theory, but I firmly believe that modeling SI from a holistic systems perspective will bear fruit in the very near future. I look forward to participating in the development of this frontier of human knowledge.

6. R. Buckminster Fuller, **Synergetics: Explorations in the Geometry of Thinking** (New York: Macmillan, 1975).

7. Here the work of Rudolph Laban takes on importance. Laban maintains that “movement is a synthesis [and] a unifying process”. See his, **The Mastery of Movement**, 3rd ed. (London: MacDonald & Evans, 1971).

PROGRESSION IN LIGHT

It is the balancing time of sun and moon:
the moon's golden drop into grey shale of the Western cloudline;
the sun swell of scarlet orange behind the sea's cloud cover.
And a quadrant from its infant majesty,
up from the sea-line in the wisp of lingering night,
the last visible star burns faintly steady;
then out: on: until, at the dusky loss
of the moon, nude gain of the sun firing
radial arms up the quadrant of Eastern sky,
the glinting star is covered by light, stained
in the blue gaze of day.

NOONSONG

The sweetest thing in life
or life in the sweetest thing
is Presence; the Presence holds,

cannot be held by all
its children of our man-
ifested universe.

Now met within this food
if not eaten over
in an eager satisfaction.

Perceived behind an oily
or fragrant sexualness
in pure, adoring ears.

Hidden at the back of barks
of anger, swollen shame,
syncopated joy.

In streams of patience, filling
possibility
in every moment's while,

the Presence comes to future
all our present limits
to oceanity.

Calm, concentration
in the play of work,
work of play; our poise

all given over
to That's desire, not ours
(no matter how refined),

invokes the union, the Love
of all love, the ocean future,
the sweetest thing in life.

Ronald Jorgensen

Ronald Jorgensen, a resident of the Sri Aurobindo Ashram, has been a regular contributor of articles and reviews to World Union during the last three years. A series entitled, "In Auroville", appeared from late 1973 to mid 1975, and another on world affairs, "Currents of Events", was published from May 1974 to May 1976. These are the first poems of Mr. Jorgensen to appear.

KELIPOTH

Charles L. Scudder

God is at one and the same time good and evil, merciful and cruel, limitless and limited, unknowable and knowable, and all these opposites are united in the greater whole which is God.

R. Cavendish

I. Introduction

In the ancient Cabala the ten lights of God, the driving forces which move both the universe and man, were called Sephiroth. Of these the fifth is Geburah and from Geburah an overplus of unbalanced force during earlier evolutionary processes formed the substance of those forms of existence known as Oliphoth (Fortune, 1972) or Kelipoth. The Kelipoth are husks, shells, the waste, litter, or filth which the organism of the universe gives off.

As we see the conclusion of the Piscean Age there is no doubt among many scientists and other men that we are also going to see

the end of our civilization and many of our institutions and people. Some expect Science and Technology to guide them, to instruct and to save them from the impending catastrophic results of overpopulation and pollution. This paper discusses and presents contemporary *scientific* observations and theories about the strategies and ethical behaviors of living systems; and on the basis of these observations this paper outlines the most probable behavioral strategy, the one we will have followed if, in the near future, we should find ourselves happily preserved as we are now.

II. Ritual and Metaphysical Science

For the sake of our presentation here, I will divide Science into two major subdivisions. The first is *Ritual Science*. Ritual Science is a procedure, mundane and pragmatic. It comprises the conducting of experiments. It is a process of measuring variables under controlled conditions of defined and maintained parameters and of comparing these measurements with those derived from similar experiments when a particular variable is willfully changed (Ashby, 1960). Ritual Science allows us to map the behaviors of systems, e.g., the be-

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haviors of the things around us. The dependability of this ritual and the blueprints which we construct in our brains from its use has permitted the explosive growth and expansion of our species (Scudder, 1975a). The procedure itself is not new. Rudiments of such behavior are found in the creativity and curiosity of other mammals which show adaptive learning and plastic behavioral development (Lawick-Goodall, 1973 or Pryor, 1973). On occasion, data collected by formalized Ritual Science constitutes valuable knowledge in that it provides, by suitable extrapolation, control over the environment. When religious dogma or concepts can be tested within the framework of ritual science, the former are weakened and abolished. There is little room for argument with "proven facts".

But Science is more, much more than the blind statistical processing of data. There is *Metaphysical Science*; and it is in metaphysics that religion and science may touch or mingle. From Mario Bunge's cogent article (Bunge, 1974), I would like to list the following ten maxims as examples of Metaphysical Science. They bear repeating.

1. There is an external world.
2. The world is composed of things.
3. Forms are properties of things (no "Platonic" forms!).
4. Things associate into systems.
5. Every system (except the universe as a whole) interacts with other systems in certain respects and is isolated from further systems in other regards.
6. Everything changes.
7. Nothing comes out of nothingness and nothing goes into nothingness.
8. Everything satisfies laws.
9. There are several kinds of laws.
10. There are several levels of organization.

These ten maxims are presupposed in Ritual Science. They are by application of Occam's razor adequate and parsimonious, sufficient and enough for most of the scientific community; and, although ethical, moral, spiritual and religious beliefs are abolished by ritual science, some of these may be isomorphic or even identical with the maxims of Metaphysical Science and with the *interpretation* put upon the data of Ritual Science when guided by and framed within the maxims of Metaphysical Science. A few examples illustrate this point. Maxim 5 and particularly maxim 7 suggest all things are in some way a manifestation of One (Tetragramaton, or God?). Cosmology admits speculation of a big bang creation of everything and maxim 6 allows the emergence of unthinkable properties for matter and space at grotesque extremes of dimensions (Layzer, 1975). In scientific thinking, abstractions and symbols and laws develop for processes which mysticism has for a long time considered the manifestation of God, for example, the attractive and repulsive forces which promote or discourage elementals and demons. A rose by any other name still smells as sweet. Metaphysical Science gives new names for old wines in old bottles. Man "evolved" from clay, transition-state metals, disulfide and dithiols, ultraviolet radiation and cyanide ion (Hartman, 1975). Maxims 5, 6, and 10 are expressed in the physiological processes underlying memory, in the growth and development and differentiation of living organisms, and in organic evolution where "random variation" and "natural selection" have generated "an immense and constantly increasing variety of ever more highly organised living forms" (Layzer, 1975). These are expressions of mysticism (Scudder, 1976). Metaphysical Science is, therefore, mysticism, a kind of religion and a perceptual vantage point both feeding and

being fed by our behavior. What does this new mysticism indicate about our future? How much more powerful is our new view of God as revealed in science?

III. Metaphysical Science and Living Systems

At every level of the hierarchy of things (maxim 10), there are systems and their behaviors follow laws (maxims 8 and 9). The systems into which things form are grouped by scientists according to their similarities or differences. One large category of systems with similar parts and properties is living systems (Miller, 1972). The category of living systems comprises more than the cell, organ, or organism. There are similarities between the organism, the group, the organization, and the *society*. It has been found, and it is believed by some in the scientific community, that in general the similarities outweigh the differences: that is to say, the principles which govern the ontogenetic and phylogenetic development of organisms and organizations are the same (Taschdjian, 1974, Beer, 1976). This implies that their behaviors are in many ways similar to one another and that, heuristically and speculatively, a group of societies or clear cut national entities can be regarded as organisms if each has within itself coordinated decision making.

IV. Gedulah: Metaphysical Science and the Behavioral Strategies of Living Systems

A. Coalitions

"One of the fundamental principles of living things is their ability to form coalitions. A coalition is an aggregate of elements which jointly can do things which all of them separately could never achieve" (Von Foerster, 1962). This was written in 1962 by Heinze

Von Foerster in a neat little paper expressing the wisdom of "two heads are better than one" and going on further to state that November 13, 2026 A.D. is a point in time when the coalition of the human population will be unstable. For our present discussion it is enough to indicate that a strategy which organic systems use behaviorally to survive when faced with a hostile world is to form a larger coordinated unit which profits from the information carried by its parts. Societies evolve from the coalition of individuals because the genetic material of the individuals has a better chance of propagation in these social beings. It should be pointed out that each unit entering the coalition has restrictions placed upon its behavior. Each unit of the coalition is less totipotent and less free. In this way the formation of coalitions decreases the freedoms of previously individual, independent units. An amoeba or ciliate is in some way far more complete than the specialized hepatic cell or neuron. Social behavior may evolve at all levels and little tribes or organizations may evolve into large nations and cartels by coalition formation. Some coalitions with concomitant social behavior occur among all levels of living systems.

B. Altruistic Behavior

Altruism is a behavior in one organism that benefits another organism, not closely related to it, a behavior that appears detrimental to the organism performing it. In a sense, altruism is kindness, consideration, goodness, and in its extreme a kind of martyrdom. Like cooperative behavior which signals coalitions, altruism is discussed in the scientific community as an inevitable product of behavioral evolution, a behavior which will develop in certain environments depending upon many factors such as: (1) the frequency

of opportunities for altruism, (2) repeated interactions among the same small set, (3) symmetrical relations. And it is furthered by such biological parameters as: (1) long lifetime, (2) low dispersal rate, (3) mutual dependence, (4) parental care, (5) low dominance hierarchies, and (6) aid in combat (Trivers, 1971). Altruism may be reciprocal and may result in symbiosis (an interspecies, extreme coalition). The evolution of reciprocal altruism has been reviewed by Trivers (1971) in regard to chordates and man. He found that a complex, sensitive, *unstable* system has evolved in man wherein there is a "developmentally plastic system of traits regulating altruistic and cheating tendencies and responses to these tendencies in others".

It is important at this point to digress from our discussion and comment on the value laden judgments about behavior which are clinically popular. It is fashionable to regard certain behaviors of living systems as healthy and others as "sick". Sickness as it is medically applied to behavior is a sociological mystique or convention (Szass, 1961). A car in perfect working condition is not "sick" if the operator (environment) drives it illegally fast. Although it is true that a mechanic, by changing the car's structure, can prevent the car's "deviant" behavior, the concept that the car was defective or "sick" and that a defect in it causes the behavior is clearly scientifically erroneous. There are no functional illnesses permissible in science.

Psychiatry has borrowed an aura of authority through its association with medicine; but psychiatry is a pseudo-science perpetuating the Judeo-Christian myth. Although psychiatrists modify behavior by using the data from Ritual Science (drugs, surgery, electroconvulsive seizure, conditioning techniques), each psychiatrist uses his own values and belief

(delusional) systems. These delusional value systems are examples of superstitious learning and have nothing in common with Metaphysical Science. The latter suggests that those behaviors which promote or at least do not detract from reproductive competence are the ones chosen to endure. They are chosen as a result of the complex, poorly understood interactions referred to by maxim 5. They are chosen by the inscrutable wisdom of the environmental mind. If there is a value judgment, it is not that of man (maxim 3—Platonic forms).

Science therefore has contributed to our view of ourselves by showing how the Tetragrammaton can be organized by a directive force (organic evolution) to show kindness, self-sacrifice, consideration, cooperation and altruism. There has been of late considerable thought directed to these behaviors and their genetics, a tendency to say that there are in nature forces of harmony and peace. All is not tooth and claw. Do not be deceived. Maxim 6 is eternally true and extinction is a fact. Although in special environments altruism and symbiosis will evolve in some things (and we practice it, sort of . . .), there are other behavioral strategies which also promote survival and may be selected for. The development of altruism, coalitions and self-abnegating behavior is promoted by the nature of the experimental parameters and the decisions of the environmental mind (Scudder, 1975b); most living systems do not show these virtues.

V. Geburah: Metaphysical Science and the Behavioral Strategies of Living Systems

Organizations, societies, nations and most organisms meet certain environmental threats most effectively by simply obliterating them, particularly if coalitions have reached their

limit. This point must be clarified. With science and technology, a few of us can control and largely regulate our environment. Ritual Science has given us this power. However, the environmental threat to our species is (1) our logarithmically growing population and (2) our pollution of the ecosystem. Each man's greatest enemy is other men.

Our dilemma was clearly expressed by Harden in his justly famous paper "The Tragedy of the Commons" (Harden, 1968). Harden described a situation in which a pasture was commonly owned. Let us suppose each man can keep a few animals on it and gain a meager sustenance. Each man is slightly richer if he keeps one more animal, etc., but the pasture only supports a limited number of animals. What does science tell us about how the men behave? What kind of behavior might evolve? They could form a coalition and punish offenders thereby keeping each man poor; but by chance alone (that's how evolution works!) one man might kill another. Those who remain are the richer for it. This procedure (murder) is a viable strategy, especially if the killings go unpunished as they will if one man kills all the rest. Our institutions, organizations and the fabric of industrialized Western Culture is faced by two spectres. One is population growth; the other, pollution. These are not the factors which lead to the evolution of altruism and coalitions. Killing is profitable. Our nation is not apt to coalesce with Canada or Mexico or the starving Pakistani. The behavioral strategy which permits our increase in view of the tragedy of the commons is to get rid of the rest of them before they get to us.

VI.

Because the factors which bring about the

evolution of altruistic behavior are absent from the environments of tribes, nations and social systems, these will (as they always have in the past) follow the left hand path when meeting the crisis which lies ahead. Another way of saying this is as follows: if we are to remain somewhat as we are (and that is our nature as behavioral homeostats), if our institutions are to stay somewhat as they are (and that is *their* way as they also are behavioral homeostats), if we are to continue to live isolated in a cloak of egotism and individuality preserving our corporeal bodies and organizations, our strategy for homeostatis will concern the fifth Sephiroth, Geburah.

Science clearly indicates that extinction is real; on the other hand, survival by taking another's life is a satisfactory strategy. The victor writes the history books. We have no options. Scientific laws are not as fragile as moral laws, are they? No matter what we profess, the behavior of systems higher on the hierarchy will prevail—and these practice no strategy of altruism. Someone will strike quickly and secretly to avoid retaliation. Someone, hopefully us, will act swiftly to exterminate most of mankind. It *can* be done. Science has given us the power, shown us the way, and provided us with the justification.

By means of a complete, totally dissolving attack on all humans except ourselves we will emerge as global man. We will control our population through perversion and chemistry (gifts of Ritual Science). We will govern and regulate the natural ecology by joyously accepting it, moving with it, gliding on the surfaces. We will practice self-determination and altruism whenever it promotes our survival; and anyone whose behavior is contrary or malignant, we will kill.

References

1. Ashby, W. R., **Design for a Brain**, 2nd ed. (New York: John Wiley, 1960).
2. Beer, S., **Decision and Control: The Meaning of Operational Research and Management Cybernetics** (New York: John Wiley, 1966).
3. Bunge, Mario, "Metaphysics and Science", **General Systems** (1974): 15-18.
4. Cavendish, R., **The Black Arts** (New York: Capricorn Books, 1967).
5. Fortune, Dion, **The Training and Work of an Initiate** (New York: Samuel Weiser, 1972).
6. Harden, G., "The Tragedy of the Commons", **Science** 162 (1968): 1243.
7. Hartman, Hyman, "Speculations on the Origin and Evolution of Metabolism", **Journal of Mol. Evol.** 4 (1975): 359-70.
8. Lawick-Goodall, Jane, "The Behavior of Chimpanzees in Their Natural Habitat", **Amer. Jour. of Psych.** 130 (1973): 1-11.
9. Layzer, David, "The Arrow of Time", **Scientific American** 233 (1975): 56-69.
10. Miller, J. G., "The Emergence of Biological and Behavioral Patterns", **Annual of the Academy of Science** 193 (1973): 281-85.
11. Pryor, Karen W., "Behavior and Learning in Porpoises and Whales", **Naturewissenschaften** 60 (1973): 412-20.
12. Scudder, C. L., "The Mind: An Evolving System of Models", **Fields Within Fields Within Fields** (1975a): 49-53.
13. Scudder, C. L., "The Environmental Mind", in **Systems and Management Science Annual**, ed. A. A. Gordon (Petrocelli Books, 1975b).
14. Scudder, C. L., "Mindless Meaning; Meaningless Mind", **Perspectives in Biology and Medicine** (In press).
15. Szasz, T. S., **The Myth of Mental Illness** (New York: Harper, 1961).
16. Taschdjian, E., "Organisms and Organizations", **Scientia** 9-12 (1974).
17. Trivers, R. L., "The Evolution of Reciprocal Altruism", **The Quarterly Review of Biology** 46 (1971): 35-37.
18. Von Foerster, Heinz, "Biologic", in **Biological Prototypes and Synthetic Systems**, eds. E. Bernard and M. Karl (New York: Plenum Press, 1962).

THE ROYAL PYJAMA'D HORSE—V

Maggi Lidchi

Then a voice said in firm tones, "Here. We brought you some water, drink up." A large shell was placed beside him and the well of water was so sweet that he drank without pausing to consider the improbability of this development. When he had emptied the shell it was refilled, and then again, until finally he looked up to see what sort of animal had so spontaneously been moved to serve him.

It was regrettable that there had been so few species of animals on his island for he was continually forced to acknowledge his ignorance by saying, "What sort of an animal are you?" But this time he didn't say it, for, as you may remember, his not altogether happy encounters had made him more reticent and he realised with a certain bitterness that he was no longer the guileless, open-hearted Royal Pyjama'd Horse that had left the shores of his native land. For another, this was a very strange animal indeed, long and thin it stood looking down at him with a head swaying in a light breeze. He wondered for a moment whether it could be one of the two legged animals to which the Maharajas belonged and of which Mukund had so often spoken, but even though in the dusk he could not be quite sure, it looked as though this animal didn't have any legs at all.

The animal said, "You are the Royal Pyjama'd Horse." Was this being then a sage or a sorcerer? "And you are on your way to

India to meet His Majesty the Tiger." Here then was the first animal to recognise him so clearly, and this wisdom placed him high in Chandrakant's esteem. It also proved that he was not in cahoots with Pomegranate who, in what was surely the clearest indication of her perversity, had been flying around inducing animals to call him a zebra. When people immediately comprehend your place in the upper strata of a hierarchy and address you by your proper title, a good atmosphere is immediately established. Chandrakant's confidence was totally won. He forgot to ask the animal who he was and launched into his story with enthusiasm.

But hardly had he mentioned Pomegranate when the legless animal said, "Don't tell me. I know that the parrot has a malign influence on you. It was a grave mistake to have put yourself in relation with a being so much lower than yourself."

"You know Pomegranate?"

"There is knowing and knowing. Yes, yes I know Pomegranate. She is a cunning bird."

Chandrakant was amazed. He would never have found this exactly right description by himself. Obviously this animal possessed some sort of superior wisdom. Chandrakant, now convinced that the being before him was indeed a sage, was strangely moved to reverence. He searched in his mind for a suitable term with which to address such a personage. For the moment none came to him; so he

merely said, "There is no solution is there?"

"Oh yes. Of course a solution can always be found, but few are those who know where to seek."

Somehow Chandrakant had known that he would say this and he was so eager to show his willingness to listen, his complete submission to any advice which might be forthcoming, that he would have liked to throw himself at the thin one's feet and clasp them as Mukund had once told him one must with the wise, but the trouble was that there were no feet. Chandrakant peered with dismay at the ground where feet should have been but were not. Perhaps the very wise had their feet worn away from constant clasping. So he merely said, "Oh legless one, help me." Once he had said it he thought it was a very good and inspired form of address so he repeated it, "Oh legless one, in thy great wisdom be merciful to me." These words came rushing out and they made him feel a little intoxicated because he had never spoken to anybody like this before. The legless one graciously inclined his head as only a well-bred snake could do.

"You will be helped", he said.

"What must I do?" The WiseOne did not answer. Chandrakant wondered whether this was because he had not addressed him by his title this time, or whether it was because he hadn't been heard. Suddenly the WiseOne opened his eyes wide.

"How did Pomegranate cast her spell? Of course I know all that is to be known of the bird and I ask your opinion only in order to see which solution is best adapted to you."

It seemed to Chandrakant a singularly wise approach, "She used to speak pottery. She used to speak into the air with her head weaving like this. It was like the sound of hoofbeats when you are galloping well on a good day or like your blood running strongly in

your veins."

"I see. A strong poetry spell."

"It was horrible. I was paralysed. When by a tremendous effort of will I was able to break the spell, I had to run away. I was not frightened of course. Nothing frightens me."

"You did very well indeed."

Encouraged by this favourable judgement Chandrakant said eagerly, "Then there is hope WiseOne?"

"Hope is beside the point. Certain conditions must be fulfilled. There are those who lacking tenacity and endurance, find these too arduous. And then it is wiser not even to broach the subject. One must have great perseverance, great will power. In fact one has to be great to be able to fulfill these conditions."

"You will find me apt, oh WiseOne" Chandrakant was already starting to get the hang of this way of talking.

"The spell is to be broken in the same way as it was woven. Diamond cuts diamond you see. Do you know that saying? It doesn't matter", he said magnanimously. "The wise often speak in riddles. It simply means that you have to defeat her by poetry. She wove a poetry spell and now you have to make stronger poetry to defeat hers."

Chandrakant could think of nothing more difficult than what was being asked of him. If only he had been told to dig ditches or carry loads. Anything, no matter how heavy or humble, but this! He was a man of destiny, a man of action. Pottery was the thing furthest from his talents and temperament. Again WiseOne spoke and again Chandrakant's objections dissolved in wonder.

"You are a man of destiny, a man of action. Poetry is the thing furthest from your talent and temperament. But it is necessary. Only diamond can cut diamond. In the meantime

until you have broken the spell, there is incalculable danger, for you that is. Thus, you shall be under my protection, and you may serve me by day and by night. Therein, and therein only, lies safety."

"How shall I serve you?"

"Bringing my water. Chopping and hauling my wood. Boiling my milk. Many such tasks are there. Well?"

"All right WiseOne" he said, without much enthusiasm.

"We shall begin at once."

Chandrakant wanted to explain that he was very tired.

"Nothing so difficult as a word spell for the moment though, Chandrakant. We start with the simpler things. You see that woodpile over there?" Chandrakant nodded. "You can bring that to me." So Chandrakant spent the night hauling wood.

Next morning after a brief rest he woke up stiff and aching in body and spirit and hoping that he would not have to spend too much more time hauling wood before he could start on the work that was to liberate him. Because while it was all right for a man of destiny to haul wood for a night or two and would certainly enable him to relate more sympathetically to his future subjects, he could not help feeling that this type of thing could easily be overdone. So he asked WiseOne when he might start with the other work.

"What other work?"

"Well I thought, you know, oh WiseOne, the word spell."

"Oh that, yes, yes you can do that in your spare time after you've filled my water pots."

Filling water pots took much time and energy, for the river was far and the water pots large and many, but exhausted or not Chandrakant was determined to start on the spell when he finished. And so, bowed and

wheezing a little, he said rather firmly, "WiseOne. I would like to start on the spell now."

"Oh you would, would you. Well all right. What's hindering you?"

"Because I don't know how to . . . yet", said Chandrakant, defiant.

"I will give you an example. I can do this anytime at the drop of a hat. There's nothing I haven't turned my hand to at one time or another." He swayed from side to side with half closed eyes. "Let's see:

Pomegranate the Parrot's an utter fool.

She spends her time perched on a branch or a stool.

Parrot I warn you, the feather take back

And with your wordspells

Chandrakant no more attack.

Take back feather and no more stalling

Or I warn you your downfall will be dire and appalling.

That would be only the first verse you understand; you could go on and on describing the terrible things that would happen to her if she didn't loosen the feather and give back your promises. Something to really frighten her. What do you think?"

What Chandrakant was thinking he couldn't possibly say aloud for he didn't find any spell in this word weaving at all. It had made him want to yawn. So Pomegranate was the stronger witch. And Chandrakant's heart sank. Not since the thin one had first held out the hope of a solution had he felt so despondent. It might well be that he could never be able to weave a spell strong enough.

The thin one said quickly: "Do not think your thoughts are not quite clear to me. You think that that was not a very strong spell,

don't you? Well you are right. But had I made one of my really strong ones you who were so easily enchanted by Pomegranate's foul doggerel would have been utterly paralysed. There are few indeed who can bear to hear my poetry unveiled." Chandrakant immediately realized how very stupid of him it had been to doubt WiseOne.

"I see, Master", he said quickly.

"I was just giving you an example so that you'd get the feeling. If I used my strongest spell, the old bird would be shrivelled up in no time: you'd be stuck with the feather forever. Now, leave me."

A few moments later, when he had trotted out of sight, Chandrakant stopped trying to look cheerful. He kicked his hind legs into the air and then pawed the ground quite crossly and then did it all over again. As soon as relief had been achieved, he settled down under a tree in a Royal Horse couchant position and tried to decide on how to start. He thought that if he moved his head in the air like Pomegranate the rest might come to him. But he soon became dizzy and had to put his head down and close his eyes before he could try again. But try again he did, with the very same result. The process was repeated several times, until once during the head weaving part of the cycle he heard a titter from above and then a soft rush of wings. God knows what he'd have done if it had been Pomegranate, but when he looked up with eyes that could hardly focus he saw that it was a group of little sparrows laughing at him. Too dispirited even to leap at his tormentors, Chandrakant dragged himself back to the legless one for an assignment of new chores. Exhaustion soon dulled the memory of the sparrows' laughter and night brought the boon of dreamless sleep.

But the next morning he was no nearer to

making a spell than before. He tried for several days, getting only more and more confused in the process while there grew in him a grudging admiration for people who could weave spells and the suspicion that the WiseOne might be less one of these than he claimed.

"It's a matter of perseverance. I told you it would be difficult. If you don't have the will you may just as well get up and walk away. I am constantly turning away animals who are better fitted for this path than you, you whom I allow to remain with me strictly out of boundless compassion. Go, if you like."

"Well sometimes I think I should. I don't see that you're doing too much for me."

"Go then, you striped donkey", hissed the legless one.

Suddenly Chandrakant grasped the legless one's identity.

"St-st-st-striped donkey!?" he shrieked, "you miserable worm", and with a clatter he reared up and tried to get at the branch on which the legless one was coiled. But suddenly there was nothing, only a dry and receding rustle of leaves and then stillness around him. The silence mocked him. Had it not been for the water pots and stacks of wood he might have believed himself waking out of a nightmare. A single kick at the clay pots sent them all crashing to the ground. Picking his way daintily through the wet shards he went for the woodpiles. There he scattered with a bump of his hindquarters. Without waiting to see how they fell, rejoicing in the sound of their tumbling, he ran and ran and ran as fast as he had ever run in his life, treading that long miserable worm under hoof all the way. The feeling of exaltation had kept his thoughts at bay, but as soon as he was forced to slow down he thought the worst thing he could think about the slimy

tyrant. Not even Pomegranate had been such poisonous company. "She was sweet compared to you" he shouted. And the moment he had thought this, there blew a soft breeze and a sigh. Something fluttered to the ground a foot before him.

It was a bird. It was a parrot. Pomegranate. The colours of her feathers had mellowed, but there was no mistaking her. She had been flying in a head wind. She surveyed him with the same wacky tilt of her head and the same greedy eye.

"Well I'll be damned" he said, then something happened to make him say it again. From that greedy round eye something plopped gently to the ground, a small pale ruby. Not a ruby of great value, in fact a ruby of the kind that is offered by the grubby handful in the streets of Colombo any day, but still . . . still it contained the first blood of Pomegranate's heart. And a sharp pain stabbed Chandrakant between the eyes. The feather had been further loosened. Loosened but not released, for when he shook his head it merely flopped into his eyes.

After various futile attempts to dislodge it, including one in which he rubbed his forehead raw against a tree, he said, "Now every time I canter or gallop I'm going to have your feather in my eye. How do you like that?" Not that he wasn't pleased to see Pomegranate. He was. But he knew that he'd kissed his freedom goodbye.

"I like it. It may remind you to do something about it." The ruby tear had released Pomegranate from the compulsion to repeat what was said to her but had not, as you see, done much for the sweetness of her speech.

"Here I am killing myself to give you a heart, and look how you talk."

"They say it gets worse before it gets better."

"They do, eh. But I can't take worse. I've been through things that'd make your tail feathers shrivel. Don't aggravate me. That's all." He had forgotten how little he could stand being with her. Even now after all he'd just said to her there was a sort of coyness, a horrible winsomeness in that round and greedy eye. More, more, more. All she wanted was still more kindness after all he'd given her, after all he'd done for her. And God knew he would have said the thing, THE thing, the final thing if he'd had the faintest idea of what it was. But he hadn't. Even her attenuated feathers served to sharpen his irritation. She had moved out of the freak category into that of the merely pathetic. Less than ever did he want to be seen with her.

It was time to make a break. Forever. Do or die. Pomegranate was standing on a low branch, head cocked to one side. He shut his eyes against the offence.

"There must be a way!" he shouted.

"What way?" asked Pomegranate enthusiastically.

"The way to my kinsman, to my conquering the world."

"You're still on that."

"If I weren't you could kiss your heart goodbye, because I wouldn't be within a million miles of you."

"It's up to you. Say something kind."

But Chandrakant instead muttered something that Fred and the other wild stallions used to say.

"Now that'll get you nowhere", Pomegranate said.

"That's precisely where I am and at least it won't get *you* a heart", for there were moments when he hated the idea of Pomegranate getting what she wanted even more than the thought of not getting what he wanted. And so it went on for many days. Chandrakant felt

too weak to travel so they had nothing to do but continue in this vein.

"A heart. My God, what do you want a heart for?" asked Chandrakant. "You were born without one. That means you're not supposed to have one. In any case," he said, "what good has a heart ever done anybody?"

"I want one", she said stubbornly.

"Look at me. I've got too much. Look where it's got me. Wasting my life trying to help you. It's no good Pomegranate. It makes you suffer." He thought of all the times Fred had kicked him. "Yes, take it from one who's got too much." Tears came to his eyes and for a moment he was sure that having given Pomegranate such good and heartfelt advice the feather would have to fall out that very moment.

The next morning Chandrakant awoke with a throbbing headache. So he'd been right after all; his kind advice of the previous day had been effective, the feather was now, somewhat painfully, working itself loose. He called Pomegranate to examine his forehead.

"Just as tight as ever, but you've got quite a lump there." Something in Chandrakant shuddered at that word. He pushed the thought away.

"It must be loose. Just give it a tiny pull with your beak Pomegranate."

"Well I don't know . . ." said Pomegranate doubtfully.

"Just try."

Pomegranate had felt, with her wingtip, that in spite of the floppiness, the feather was still firmly rooted, so now she gave it only a half-hearted tweak. "Nothing doing", she said.

Enraged, Chandrakant jumped up, which set his head throbbing more violently.

"You didn't even try", he screamed. "If you can't do a little thing like that for me after all I've done for you . . ."

"Oh all right, all right", said Pomegranate. She took the feather in her beak and gave a sharp and not altogether unspiteful tug.

"Oowwwwwwww-ooooooooo!" Chandrakant threw his head up and snapped wildly at her.

Seeing the rows of great malign teeth, Pomegranate squawked wildly and flapped up onto a high branch. In his rage Chandrakant galloped round and round in a circle. While he galloped he felt nothing. But the moment he came to a stop under Pomegranate's tree, and before he could yell his insult, he sank to his knees and whispered, "I'm dying." Pomegranate floated down a little.

"Do you want anything?" She suppressed the impulse to offer another tug at the feather. For one thing Chandrakant really did look very ill.

"Yes, I want you to die."

"Why?"

"Because." It had just come to Chandrakant that if Pomegranate was not there, if she were wiped out and not sitting on any branch of any tree in the whole world, the feather on which she seemed to have some hold would fall out and all his problems would be over.

"That's a good reason." Now that there was a little blood in her heart it was more difficult for her to listen to Chandrakant in silence, a fact which was not lost on him.

"That's what I've done for you," he said, "I've given you feeling. I've taught you to answer . . . you witch, you witch!" he shrieked. And then his language got very bad, but fortunately he got so hysterical that at a certain point his railing lapsed into an inarticulate gurgle and he mercifully lost consciousness.

Pomegranate surveyed him glumly from her perch.

[To be concluded in the issue of August 1976]

DECADENT EXPRESSIONS OF EGALITARIANISM AND HUMANISM IN EDUCATION—II

[Concluded from the issue of June 1976]

Henry Winthrop

4. The Backlash among Educators

Fed up to the gills over the shenanigans that have taken place in education these last ten years and desperate over the mockery that has been made of higher education, educators in many places are striking back at current trends. At the moment they are clearly a small minority. But the exigencies of life in a socially complex society make it necessary for such a society, in the very near future, to have millions of competent citizens who must man battle stations in the tasks of social reconstruction. In order to obtain an intellectually fit and mature citizenry, it will be increasingly necessary to subject prospective college enrollees to more, not less, intellectual and professional discipline. Students have been asking for watered-down education for more than a decade, and frightened or misguided educators have been satisfying this demand. The type of graduate produced by this folly has proven, in too many instances, to be a failure both in graduate school and in the workaday world.

But even worse than this is the increasing recognition that the meaning of higher education has been mocked and transmogrified by catering to the demands of intellectually immature students. The recovery of learning has now become a basic social and educational problem. Our society cannot have sufficient and intelligent citizen support from college graduates among whom are to be found millions who simply do not have what successful professional work and thoughtful citizenship demand. As a result a minor backlash is occurring among teachers in higher education—a backlash that may develop into a major professional revolt. It is, I think, a justifiable and well intended backlash. The object of this last section is to provide the reader with the viewpoint of a few of those voices in education that are currently protesting the debasement of higher education.

With respect to periodical literature, *Time* magazine has seen fit to comment critically on both grade inflation in academia and the fact that in some institutions more than 50 percent of incoming freshmen can neither write clearly in their native tongue nor carry through an idea in prose.¹ *Time* reports that with respect to grade inflation, Stanford undergraduates have an average GPA that exceeds 3.5 [on a scale where 4.0 equals all As],

1. "Too Many As. Bonehead English", *Time* 104, no. 20 (November 11, 1974).

that in one spring-term 42 percent of all Yale undergraduates received As and that 46 percent of the Yale senior class graduated with honors. *Time* also reports that at American University, 75 percent of all grades in the spring of 1974 were As and Bs. This prompted an undergraduate dean to ask for a faculty inquiry. Five years ago, says *Time*, the average grade at the University of Pittsburgh was C. Now it is B. *Time* explains why all this is happening.

Many students are using pass/fail options in difficult courses, thus reducing the percentage of low letter grades. For their part, many professors started giving higher grades in the late '60s to help students escape the draft, and some have wanted to avoid what they regard as the "punitive" effects of grading. Explains Pittsburgh Dean Robert Marshall: "We're getting away from the old concept that people should be required to jump through hoops." Some instructors are overly aware of the faculty evaluations their students will write at the end of the course. In effect, they are bribing students with good grades to get good grades themselves. Others are simply being generous, awarding more As and Bs because students need them to get into graduate school. This is tough on graduate schools. "Everyone coming in with a 4.0 makes it hard to evaluate the grades," says William Keogh, assistant dean of Stanford's law school. As a result, many graduate schools are increasingly depending on entrance exams.

A Stanford committee has looked into the grade situation there. Its chairman blithely explained that grade inflation could be accounted for by recognizing that we live in a non-judgmental society. But, comments *Time* tartly, "today's graduates may be in for a rude shock when they discover that in the workaday world, not everyone can count on As".

Almost half the freshmen at Berkeley flunked an English composition exam in the fall of 1974. They have had to enroll in a remedial course known around that campus as "Bonehead English". With respect to the American freshman's ability to express himself in writing *Time* quotes the director of freshmen English at the University of Houston.

Students can't carry through an idea in writing; they have no idea what a paragraph is; they are unable to string details together in a logical sequence. They're just sort of vapid.

The director of freshmen English at the University of Texas blames freshmen shortcomings on the fact that high school students today do not read as much as their predecessors. She adds that they were reared on television and were simply not forced to use the language very much. Others lay the blame directly on the country's secondary schools. Thus, the chairman of the English department at the University of Miami has this to say:

The fundamentals are not being taught properly in secondary schools. The SAT [Scholastic Aptitude Test] and College Board scores across the country have shown a considerable lowering of verbal ability.

It should not be assumed that this decline in the ability to express oneself is occurring only at the more plebian universities. It is also happening at our patrician institutions. A Harvard professor of English asserts that all of that institution's undergraduates have to take a twelve-week course in expository writing. An English professor at Harvard has this to say:

We try to teach them to write a simple, clear sentence that says what they mean and then arrange those sentences in some orderly fashion. Most of them don't know how to do that when they come here.

As the tide of educational decadence rolls on, the moral courage, on the part of professors, to resist it is conspicuous by its absence. *Time* tells us that in the spring of 1974 the Conference on College Composition and Communications passed a resolution upholding the right of students to their own language. Outraged, the head of the English department at Ohio State University, had this to say of the resolution:

It is broad enough to wipe out even the need to learn how to spell. That's misplaced humanism, not education.

***Time* magazine is only one of the popular periodicals that have dealt with the backlash now setting in against the many bastardized forms of educational decadence—of which grade inflation is but one example. We are beset, of course, with many others. Currently, professional periodicals are also publishing material that indicates that educators, themselves, are in revolt against the residues of the educational distemper of the 60s. Thus we find Russell Kirk, the distinguished conservative intellectual, lashing out at the educational disorder and intellectual disarray that is now lodged in the American university.² Kirk's quarrel is not with our current grading procedures, although those familiar with his work and his outlook would know that he clearly disapproves of the mockery of human judgement that current grading practices reflect. Kirk's quarrel is with the immorality and corruption that are now so conspicuous in many American institutions of higher education. Many of these institutions have become thoroughly politicized. They have done so in order to accommodate to selfish and reactionary politicians and business interests, as well as to the legislators that these same vested interests have snugly tucked away in their pockets. Both these groups can—to a large extent—make or break public institutions of higher education. Universities are also responding to pressures from the incomprehending, confused and often uneducated**

2. Russell Kirk, "Liberal Learning, Moral Worth, and Defecated Rationality", *Modern Age* 19, no. 1 (Winter 1975). This paper was based on an address at the annual meeting of the American Association of Presidents of Independent Colleges and Universities, at Scottsdale, Arizona on December 2, 1973.

taxpayer whose inconsistent but organized demands on the schools and whose rampant anti-intellectualism have now become somewhat institutionalized nationally. Grade inflation and many other current but deplorable practices in higher education are, in a sense, among the concrete expressions of academic immorality and academic loss of perspective with respect to the true functions of education.

For Kirk a moral outlook has been lost in higher education. Many of our younger teachers in academia have never even acquired a sense of moral worth and ethical discrimination. There are teachers who are the product of the atmosphere of radical political dissent in the 60s, the defiance of the existing American middle-class way of life and the so-called sexual revolution of the 60s. Many of these morally unanchored souls, with their fragmented and amoral outlooks from the 60s, now reinforce the unethical and thoughtless demands of the grade-hawks among our undergraduates today. Looking about him Kirk notes the obsession of many undergraduates with sexual hedonism and the general lack of standards they exhibit in their behavior, particularly in relation to the purpose of higher education. He puts it this way:

Time was when parents took it for granted that their offspring would acquire at Podunk Ecumenical College considerable ethical understanding—together, perhaps, with a touch of the unbought grace of life. Strange to say, some parents still labor under the illusion that the typical American campus will improve the morals and the manners of the rising generation. Yet actually a well-appointed bordello would be a residence more decorous and less costly, for four years, than are the co-ed dorms of Behemoth University. Doubtless one would learn more of the art of worldly wisdom in a bordello than an undergraduate learns in the various "counter-culture" programs which have been accepted on many a campus as a sop to ineducable pseudo-students. And the company of an Athenian courtesan or a Japanese geisha might be positively elevating, by the side of discourse in one of our campus teen-age ghettos, which suffer from the cruel tyranny of the peer-group.

Kirk notes the limited intellectual fare offered to our brighter students. This fare consists of a narrow emphasis on logic, facts and science unrelieved by the humanistic tradition or the Socratic pursuit of virtue, both in one's personal life and in the community at large. This lopsided emphasis leads, of course, to a thoughtless and immature ethical relativism. Kirk characterizes this strait-jacketing of the whole man—untouched by holistic breadth of any sort—most pungently. He says:

At best, what the typical college has offered its students, in recent decades, has been defecated rationality. By that term, a favorite with me, I mean a narrow rationalism or logicalism, purged of theology, moral philosophy, symbol and allegory, tradition, reverence, and the wisdom of

our ancestors. This defecated rationality is the exalting of private judgment and hedonism at the expense of the inner order of the soul and the outer order of the republic. On many a campus, this defecated and desiccated logicalism is the best which is offered the more intelligent students; as alternatives, they can embrace a program of fun and games, or a program of "social commitment" of a baneful or a silly character, wondrously un-intellectual.

The consequence of this altered view of the ends of American education, it seems to me, if it is carried to its logical culmination, will be the effacing of that principle which for three centuries has breathed life into the unwieldy bulk of our educational apparatus. I do not perceive any practicable substitute for this old sustaining principle. Therefore I recommend that we do whatever we can to restore a consciousness that the aim of American higher education is this: the imparting of a sense of moral worth, ascertained through right reason. Without a proper understanding of moral worth, there is no point in talking about human dignity, or education for democracy, or adjustment to society, or training for leadership, or preparation for personal success. For what gives the person dignity, and what makes possible a democracy of elevation, and what makes any society tolerable, and what keeps the modern world from becoming *Brave New World*, and what constitutes real success in any walk of life is moral worth.

Kirk feels that students who obtain some understanding of moral worth, through instruction in education, can be counted upon to resist the follies of our time. It is the absence of such instruction in higher education--and, of course, the absence of such instruction from parents and peer groups--that contributes in a substantial degree to the concrete expressions of undergraduate immorality. Among these undergraduate expressions of immorality--or, as Kirk would put it, of undergraduate lack of a sense of moral worth--are the following: demands for grades that have never been earned; demands for subject matter that will constitute "a program of fun and games, or a program of 'social commitment' of a baneful or a silly character, wondrously unintellectual"; demands that students be allowed to determine the curriculum; demands for courses in the occult, in witchcraft, in sexual techniques, in personality development and charm, and so on; demands that students be allowed to determine what they call "relevance" and insistence that courses that are not relevant be expunged from the catalogue; demands that students be allowed to choose a text that they--not the instructor--regard as appropriate for a course; demands that students be allowed to innovate grading methods and be the judges of the accuracy and honesty of grades received; demands that a student be free to take any potpourri of courses and that, regardless of the mix involved, some sort of degree be established for any mix; the demand to be allowed to play a role in the hiring and firing of instructors, including tenured ones; the demand to be

allowed to play a role in the grading of their fellow-students; demands that they be allowed to determine the college's or university's budget, class sizes and course fees; and other demands that I am glossing over because those mentioned are already representative.

Another author who has lashed out against contemporary forms of educational degradation is the historian, Donald M. Dozer.³ The university, this historian notes, is being distorted and turned away from its original functions, so that not only are the historical functions and purposes of higher education being obliterated, but irrationalism and anti-intellectuality are being regarded as positive attributes. These upside-down arrangements are being treated as virtues and as progress in some institutions. Often overlooked is the great danger that lies in having our prospective enemy, the USSR, demanding intellectual discipline from the citizens in its schools, while we continue to water down the demands for intellectual discipline in our own system of education. So far has this degradation gone that, in many cases, it is to be assumed that many of our corrupted institutions of higher education have, perhaps, achieved a permanent point of no return. Dozer summarizes the transmogrification of higher education in the following words:

The basic meaning of the word *university* has become sadly distorted. It connoted originally a place where the search for universals could be pursued, where wisdom, sometimes defined as God, could be studied and known, and where absolute values could be pondered and possibly acquired and lived. But now the university is conceived, both by the public and by a seeming majority of educationists, as a place for everybody, as an institution illustrating democracy in action, as a place where miracles can be wrought that will convert the hitherto inert and unintellectual elements of society into useful elements, the emphasis being placed upon their utility to society. Under barrage of the syndromes of democracy, institutions of higher learning are being required to do what the university was never created to do, namely, serve a directly political function. Its earlier efforts, when the university was conceived as aiming at the discovery of wisdom, often produced results of a political nature, but these latter were incidental. Now the university is being expected, even forced, to the delight of educationists of the Dewey school, to assume a direct and mammoth political role.

Dozer accuses the modern college and university of encouraging many specious forms of education, all adding up to academic humbuggery. The chief forms of this humbuggery are dishonesty in the granting of grades, credits and degrees. Dozer sums all this up as follows:

In the light of such facts it is no wonder, concludes Professor Ernest van den Haag of New York University, "that many students think higher

3. Donald M. Dozer, "Educational Humbuggery", *The University Bookman* 15, no.1 (Autumn, 1974).

education as it exists is irrelevant to them. It is [so] because they are irrelevant to it." He asks: "What happens to the students who are not educated, even though they are enrolled, and to the professors who profess without professional competence? One possibility--which is becoming an actuality in many institutions--is the debasement of the coin: grades, credits, and degrees are given without the learning for which they are supposed to stand. Students are graded beyond their achievements, educated to pretentiousness, and to ambitions beyond their possibilities. Since much grading is done on a curve, which may measure only the relative standing of the members of the class, this result is easily achieved, and as easily hidden.

All this offers alarming evidence of the approaching breakdown and intellectual bankruptcy of higher education. Under pressures applied largely by political forces and blatantly assertive minority groups, colleges and universities have accepted growing student involvement in academic decisions, lowered standards for students and faculty, and modernized curricula revised radically downward. They are still, in a certain sense, living in the climate foisted upon them by the exigencies of World War II and by the educational theories of the Armed Services which made it necessary for professors of violin to teach courses in navigation and professors of history to become psychological warriors. They have succumbed to a deplorable humbuggery, offering specious courses of instruction, indulging in fly-by-night educational schemes, and promoting a sensationalism which is based on the principle that, as phrased by William Graham Sumner almost a century ago, "seeming is as good as being." He added in words applicable to higher education today: "Its intrinsic fault is its hollowness, insincerity, and falsehood. It deals in dash, flourish, and meretricious pretence. It resides in the form, not in the substance; in the outward appearance, not in the reality." Its sponsors have cheapened the entire educational process by holding out the hope of "a royal road to learning, when, in fact, the only way to learn is by the labor of the mind in observing, comparing, and generalizing, and any patent method which avoids this irksome labor produces sham results and fails of producing the mental power and discipline of which education consists."

We are witnessing the degradation of education everywhere throughout the nation. Grading practices and grade inflation constitute only one of many expressions of this degradation in education. The moribund state of affairs that we have been describing throughout this paper is, perhaps, only the expression in the educational sector of our culture of a general decline of Western civilization. There are other aspects of this decline of the West: corruption in government; the hoodwinking of consumers; corporate domination of many of our institutions, including blocs of Congressmen; financier control of much of our economy;

a recession and employment decline that may last longer than the more thoughtful economists tend to believe; the obsessive concern with sex and violence in both literature, the cinema and the arts; the paralysis of the religious impulse in our time; the lost arts of communication, together with a hostility towards the rigorous expression of ideas; the continued willingness of Western cultures to put up with the increasing global ecopathologies of our time; and many, many other large-scale examples of situations that one may reasonably assume may be the current expressions of a decline in Western civilization. If we cannot recognize that we are observing many such widespread declines, this may be because (1) we are too close to what is happening and (2) the congenital optimism of Americans prompts them to repress such interpretation. In any event, if education is being increasingly debased, we may already have reached a point of no return. If the small-scale backlash among educators reaches larger proportions, perhaps the debasements of the last decade may be reversed. If they cannot, and the degradation continues on course, unmolested, Western civilization's best obituary may prove to be an ancient adage: "Whom the gods destroy, they first make mad."

METAPSYCHIATRY, PARAPHYSICS, MYSTICISM OR HUMANITY?

A Short Overview

Robert A. Smith, III

Are metapsychiatry and parapsysics legitimate pursuits or only others in the long list of Americans' favorite pastime—pursuing fads with the messianic zeal of a world coming to its end. I find no difficulty whatsoever in the fact that psychiatry should interface with other disciplines as Galdston pointed out, for example, with anthropology. Or as Laing, Sullivan, Lewin, Bateson, Gray, Rizzo, and Miller point out in a general systems sense in fields rather than in the singular mode. But having grown up in the American South where psychic phenomena and mysticism were accepted quite readily, I find it difficult to be so thoroughly amazed by all the psychic self-indulgence and psychic selfishness taking place with narcissistic actors getting so much applause for their perfor-

mances. Not only narcissistic actors but the mushrooming of collective narcissism under recent guru manipulation is also to be viewed with some misgivings.

The human brain is still that "unexpected universe" and should be explored in "unexpected" ways. We should, as my friends Roland Fischer and Hans Esser point out, map this vast mental universe and become cartographers of inner space. Instead, rather astoundingly, I see us trodding tradition-bound ways in our explorations. As esoteric as it appears, the method of Timothy Leary and his followers is that of ancient tradition, and, instead of truly promoting unity, these methods continue Western dualism of being/non-being or reality/non-reality rather than being holistic or image producing without volitional mechanisms. On the other hand, what Houston and Masters are doing to restore eidetic imaging with their ASCID cradles I feel is wonderful. Their machine basically resembles the old rubber tire swings under the chinaberry tree and performs pretty much the same way. Although the device differs from the rubber tire swing, the idea is nearly the same as to the results expected. As children, we would twist the rope and shut our eyes as the tire rapidly unwound. This either made us extremely ill or created marvelous images. Lying on grass and looking at clouds and silently meditating produced other im-

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ages, and clear nights with stars and wild bird and domesticated animal sounds produced other images and occasional astral projections. Running unfettered in woodlands like Pan and leaping like Nijinsky in earthy ballets of our own creation enabled us to know our own powers of levitation. And then came schooling of the formal variety and all this sweet innocence of holistic knowledge and gestaltic perception was suddenly no longer ours.

But if science is the intellectual father figure of our age, then faddism is the emotional mother figure. The Apollonian and Dionysian forces within us are having a devil of a time coming to any kind of complementary position because of our polarized way of doing business with ourselves. I think the disenchantment with science, albeit not always a wise course, has led to a serious flirtation and a "group-think" emotional rigidity with fads in zen, esoterica, communes, erotica, etc., to offset the puritanical dominance of engineering science. But do we really live or should we live in a world of such pure immediacy? I think not. I think we live in a world of symbolic forms, which evoke meanings—the cross, the Star of David, the Red Star, the hammer and sickle, the yogi in bound lotus asana, the mandala, and recently the Comet Kohoutek. These are certainly involved in the cultural evolution of man where he is torn between his biological animality and his spiritual divinity.

And so again I must pose the question, metapsychiatry or humanistic psychiatry. Most assuredly the archetypal discoveries of Jung and his followers are important. How closely the myth of the beginning of mankind is related in each description of it—Norse, Hebrew, Greek, Persian, etcetera with minor exceptions. It is also interesting to note how

vital myth has been to human evolutions. But few have connected the role of mystics in the projection of myth. I will not do so in the paper for the sake of brevity.

"The survival of our planet depends on humanity evolving to a new level of consciousness"; so states the ARICA Institute slogan. I fully agree. I support a view held by Richard Ingrasci that "the transformation of consciousness involves changing from a predominantly rational, linear, reductionist, ego-centered worldview to a more holistic, alinear, intuitive perspective in a balanced, literally *co-incidental* functioning manner *along with* rational mode—a convergence of the experiential and experimental approaches to knowledge". Now this means to me experiencing freely without the paralyzing effects of "group-think" whether it is group therapy, EST, television, suggestology, or whatnot. It also means experimenting under control but not rigid conditions. I think when this is the case one sees the unity of myths, the unity of practices, and the unity of mankind or a consciousness which draws heavily upon intuitive forms of cognition, thereby enabling us to regain gestaltic perception and see things in terms of whole systems or isomorphically the hierarchy of systems.

While I am in full agreement that "peak experiences" or mystical flashes indicated by Abe Maslow, Unamuno, Sri Aurobindo, Gurdjieff, Gibran, St. John of the Cross, and others are wonderful, I feel that the development of biocomputer techniques may enable this happening, formerly limited to the psychic elite, to be achieved by the democratic many. Joe Kamiya, Elmer Green, Charles Tart, Robert Ornstein and others are pointing the way. But they too must be careful. Too much dependence on the cyborg techniques at this time will make the human as mechanical

as extreme yogic practices or as time-clock punching Western industrial workers. Some spontaneity is always essential. Otherwise we indeed become "ratomorphic" and "robotic".

Because fewer people will have the opportunity to experience the wonder of nature in its pristine beauty as I did, and fully enjoy the eidetics of youth, we will be forced to turn to the new medium, television. Here we can create electronic mandalas, blossoming lotuses, music for the universe with revolving galactic images, and a psychosynthesis of life. Wonderful Esalen is for the elite and so are many other delights. Television is global and for the masses. It has a mass altered state of consciousness all of its own. This, to me, is the role of metapsychiatry—that is, making television a human medium for human transformation. For we shall have to penetrate beyond Freudian metapsychology and its levels of id, ego, and superego, as well as the levels of Jungian metapsychology of energism and archetypes, and reimmerge ourselves in the archaism of humanity. Identification today is moulded by forces in which the individual feels left out and alone. The communication media foster an automatic response from the viewer because they supply us with ready-made images and mass-produced myths wiping out our folkways and idiosyncracies, whether it be the voodoo which surrounded me in childhood or some of the Creek Indian folkways of my ancestors. But, again, I feel that television supplies a means for human transformation because it possesses the greatest means for developing social consciousness on a global basis. It provides a means for wresting away the manufactured myths of the twentieth century such as those perpetuated upon us by the Nazi and Fascist obscurantists. Thomas Mann

and Ernst Cassirer have warned us that it also provides a means for supporting such myths. For psychiatrists to assume their metapsychiatric role and proper interfaces with mysticism and humanity, they must learn the power of the communications media and associate themselves with Bach and Goethe, Dante, and Rumi lest they suddenly find themselves supporting New Huns on our horizon. Gershwin and some recent musical arrangers such as Pierre Boulez, Karlheinz Stockhausen, Willard Van De Bogart belong here; they are new "Goethean" types. Ron Hays, the young visual artist at MIT who is currently working with Interface, a Boston group, and particularly with Itzhak Bentov, a cosmologist, also belongs here. The global theatre described by Frances Yates may be transformed into the planetary theatre of Gene Youngblood's "noosphere"; Youngblood calls it the videosphere. To quote Harry Slochower, psychiatrists must reexamine the mythopoeic prototypes and move: in a synergic rhythm between the dark pits and the sun-lit heights.

To reach upwards, they lie on the heap of ashes of Job, stand on the crossroads with Oedipus and Dante, go down into the caves of the Mothers with Don Quixote and Faust, expose themselves to the ravages of primitive sensualism with Mitya Karamazov and the oceanic terrors with Captain Ahab. In short, psychiatrists, to become metapsychiatrists, must go through the rites of passage—the recurrent theme of mythology and mythopoesis. In doing so they will discover new ways to help mankind reach its potential.

Because of the rapid proliferation of instant fixes promised by a new generation of gurus and techniques, I feel some words of

caution are essential. Irving Janis has demonstrated that groups, like individuals, can bring out the worst as well as the best. Our failure to recognize the worst blinds us to the fact that group or collective narcissism is a poly rather than singular mirror reflection of narcissism. What Janis is saying, and with strong support from Erving Goffman and Peter Marin, is that the psychological drive for consensus at any cost effectively suppresses dissent as well as appraisals of available alternatives in strongly cohesive decision-making groups. Recognizing, of course, that cohesion is necessary, it becomes extremely important for groups to listen to and evaluate deviant thought and actions by individual members.

With this in mind, we can return to our theme of transformation. Jacob Needleman

sets the stage: "A cosmos—and, of course, the cosmos—is an organism, not in the sense of an unusually complicated industrial machine, but in the sense of a hierarchy of purposeful energies." I certainly feel that this is the case, and developing a cosmic, pantheistic and transcendent awareness becomes vital.

Transformism is the vision simply of an organic universe, and more especially an organic world, whose parts are physically linked together in their appearance and their destiny.

Pierre Teilhard de Chardin
The Vision of the Past

True psychology . . . is the study of the art of creating a soul.

Rodney Collin
The Theory of Celestial Influence

References

1. Duane S. Elgin, "The Third American Frontier: Proposed Strategies for Exploring Human Potentials" (Stanford Research Institute, October 1973).
2. Richard P. Ingrasci, **Public Health Applications of Altered States of Consciousness** (Cambridge: ISHI Research Center, 1973).
3. Irving R. Janis, **Victims of Group Think** (Boston: Houghton-Mifflin, 1972).
4. Jacob Needleman, "Sacred Tradition and Present Need", **Main Currents in Modern Thought** (November-December 1973); also, **A Sense of the Cosmos** (New York: Doubleday, 1975).
5. Paul Ricoeur, **The Symbolism of Evil** (Boston: Beacon Press, 1967).
6. Harry Slochower, **Mythopoesis** (Detroit: Wayne State University Press, 1970).
7. Frances A. Yates, **Theatre of the World** (Chicago: University of Chicago Press, 1969).
8. Gene Youngblood, **Expanded Cinema** (New York: Dutton, 1970).

REVIEWS

Nations in Conflict: National Growth and International Violence, by *Nazli Choucri* and *Robert C. North*. San Francisco: W. H. Freeman and Company, 1975. 368 pages, \$12.95.

Nations in Conflict fits into several areas of currently popular research activity: peace research, global modeling, modeling techniques, behavioral international relations, and technology-society-natural resource interactions. Without explicitly using the jargon, the book presents a general systems model of international relations behavior and tests it with data from the European states system for the period 1870 to 1914.

Despite some coarseness, this book is the most impressive product to date of the behavioral movement in international relations research. In its theoretical framework, it makes the important shift from a single, vague, "mover" of the international system to a multifaceted systems view. The focus is on a single fully-dependent variable—international conflict; others could have been chosen but, like dollars in economics, this appears to be the most useful analytic construct in international relations research. Several older bodies of theory have been recast into the Choucri-North mould as it incorporates demographic, economic, technological, political, and natural resource factors into a general model. Combined with the richness of a general systems framework, it forms a new, broad, and clear representation of international relations.

Nations in Conflict is organized in three parts. Part one presents the conceptual framework. As used in this book, the model has five components: expansion, conflict of interest, military capability, alliance, and violence behavior. These interact in numerous ways. Expansion, neatly defined by the concept "lateral pressure", is a collection of the "demands resulting from the interactive effects of population and technological growth" which gives rise to extraterritorial activity. When expanding powers intersect along some dimension conflicts of interest occur. Military capability is produced by both external competition and domestic military-industrial establishments. Alliances are methods of enhancing national power and are sources of paranoia for opponents. One result of the complex interactions of these four components is violence behavior.

Part two rewrites the history of the major European powers (Austria-Hungary, Britain, France, Germany, Italy, and Russia) from 1870 to 1914 into the terms and context of the conceptual model.

Part three presents the empirical investigation. Simultaneous linear equations are used to test each of the hypothesized links in the model for the system, for each country, and for

various time periods. The outputs of this estimation procedure are used as parameters for a simulation attempting to replicate the processes leading to World War I. Most of the detailed methodological material has been placed in appendices; a considerable portion nevertheless remains in the text. An extensive bibliography is unfortunately weakly organized.

Despite the application to international relations in *Nations in Conflict*, the lateral pressure model can easily be expanded and made applicable to most species and their environments. It focuses attention on the pressures exerted on the boundaries of system components as resources are consumed by population and technological development. There are many dimensions of pressure, most of which focus on that part of the component responsible for its control (e.g., national elites in the case of countries as components). There is also a variety of potential internal and external responses to pressure. The interaction of demands on resources with capabilities to satisfy them weaves the dynamics of the component. With the aggregation and interaction of components, the system takes shape.

There are three principal ways in which component resources may be augmented in response to increasing demands: domestic resource development, alliances and trade, and external conquest. Avenues chosen depend upon the existing state of the component's capabilities relative to those of its environment. For example, if one component has high pressure and strong military capability while its neighbor is not able to balance such strength, one expects military expansion of the first component. It is possible for two components to interpenetrate along different dimensions (e.g., A penetrates B militarily, B penetrates A culturally). Should both try to penetrate the same territory, their interests conflict and the situation is ripe for violence. One can also consider a situation where regional pressure differentials are such that whole sets of components will expand or contract together as the European region has over the last five centuries. A great deal of complexity can be made understandable within the terms of a relatively simple dynamic model.

Nations in Conflict is almost as interesting on the methodological side. Choucri and North have deliberately used more than one major analytical technique, a relatively rare phenomenon in most academic research. The particular combination of optimization and simulation is deservedly gaining popularity in several diverse fields. Such signs that researchers are beginning to choose methodological tools in accordance with their task, rather than having their initial technical competence determine their research topic, are most welcome.

There are times when one feels that this book would have benefited from a few more months of editorial scrutiny. Despite the logical format, it does not flow smoothly. The rich background of theory and methodology is not knitted together in polished form. The statistical results reported are quite inconsistent in both accuracy and importance. Severe problems of operationalizing the conceptual model remain (expansion, for example, is operationally defined as colonial land area acquired). To their credit, the authors recognize these failings and explicitly admit them in the epilog, noting that the book is "essentially a progress report". The honesty is appreciated but *Nations in Conflict* remains a coarse progress report.

Presentation could be much better. The research is painfully unfinished. And yet the

inadequacies tend to reinforce one's impression of the size and importance of the task begun and the challenge posed to other researchers. The "bare bones" start made on this project, displayed in *Nations in Conflict*, justifies both current publication and wide attention.

Tom Bryant

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Emergent Man: His Chances, Problems and Potentials, edited by *Julius Stulman* and *Ervin Lazslo*. New York: Gordon and Breach, 1973. 185 pages.

Emergent Man is the first volume of the World Institute Creative Findings series; the second is Oliver Reiser's, *Cosmic Humanism and World Unity*. The series is designed to reflect the work of the institute, a central purpose of which is outlined by Julius Stulman, its founder and president, as the development of:

a new methodology for thinking that leads us from the singular viewpoint to a system of thinking, from system to an organization of systems to synthesis—in other words, a methodology of integrated thought and action in which there is continuing feedback and flow forward to deal with constant changes on all levels.

By interrelating and canalizing all fields of knowledge and all domains of life via a terrestrial "brain resource" which expands and multiplies the flow and exchange of information and facilities for action and creation for everyone connected with the "brain", this new methodology catalyzes every member's potential for learning, growth and output, and so achieves a synergistic effect: the result far surpasses the sum of all individual resources, opening otherwise unattainable vistas and possibilities for humanity.

The establishment of such a global network is naturally bound to lead to a holistic mentality and thought-process which will replace the linear, dividing, and narrow reason. Today, it is only too obvious that the latter cannot cope with the problems of the evolutionary challenge: to grow beyond the rational animal-man into the true and new human being, the cosmic man and, ultimately, the gnostic superman. Among the prophets of the new age, Sri Aurobindo long ago pointed out the necessity of a transformation, a heightening and new-

creation of the mind by the influence of what he termed the supermind or truth-consciousness. In his last writing, *The Supramental Manifestation Upon Earth*, the resulting new intelligence was termed the "mind of light".

With the emergence of the World Institute and numerous similar efforts in many different areas of life all over the world—Buckminster Fuller's World Game, the educational community of Lindisfarne, the Club of Rome, and Auroville (the international and interdisciplinary model society for the development of a new and fully integrated humanity) are perhaps the most prominent examples—an important step is being taken towards the formation, the evocation and the actualization of a truth-conscious, global, creative and synthetic mentality which will serve as an agent of transition to the emergent planetary culture: the next rung on the ladder of human evolution.

The ten authors (including the editors) of the eleven essays compiled in this book belong to the avant-garde of progressive thinkers and scientists in the West. Names like Abraham Malsow, Oliver Reiser, Robert Smith, and Gardner Murphy need no introduction. The range of the essays covers three vast fields, each of which constitutes one part of the publication. In sequence: "Man and Mind", "Man and Environment", "Man and Universe". Naturally, the scope of these 185 pages can but focus on essentials and some aspects of this extensive panorama. Often, the papers put forth a general introduction to the comprehensive and detailed work of the authors, as is the case with Sidney J. Parnes' extremely informative and enriching piece, "Creative Potential and the Educational Experience". The essay is like a window through which one gazes on an attractive exhibition of new developments in the many different fields of research undertaken today; it arouses our eagerness to cross the threshold and to explore not only more, but all. Likewise, Stulman's "Beyond Crises" and Reiser's "The Cosmic Lens, the Galactic Disc, and Archetypal Holograms" serve as pointers to the authors' comprehensive treatises which have appeared in book form.

Emergent Man bears testimony to the rise of a new science, that is to the material Western-world aspect of the new planetary and integral science. The initial discoveries as well as the self-mutation which science underwent during this century are now grown from seeds into buds, announcing the flowering which is yet to come. Four characteristics are clearly visible throughout the book.

The momentum "from orthodox through occult science to spiritual science in search of omni-science"—to use the phrase of Brad Steiger and John White—marks the cardinal evolutionary direction. It is interesting to note that spiritual science, yoga, also in search of "omni-science", moves along the inverse course from Spirit to Matter, embracing the occult and material sciences, in fact all dimensions of life on earth and in the universes.

The second main characteristic is a true integralism which includes all particular "isms" and assigns to each one its due place and harmonious role in the totality. The dichotomic Aristotlean either/or logic of "true" and "false" is today obsolete. There is a third, *tertium datur*. Equally outdated are all linear, partial approaches to one of the infinite facets of Reality. Antagonisms are constantly transcended and seen as complementaries. Hierarchical structures and "field within fields . . . within fields" are perceived everywhere. Synergy, synthesis and syntropy are the common principles.

Thirdly, the illusive walls of isolation and separateness and division are ever more being shattered by the vision, discovery and experience that everything is interrelated with everything else. All is part of the single Whole, and so affects and is affected by this and all the other elements and movements of the supersystem; a constant exchange of vibrations, forces and influences takes place. Interdisciplinary field-thinking is the key strategy. Mere knowledge of facts about things is secondary to knowledge of relations between things.

The last feature is the dynamic factor— of change, growth, progress. We have reached the stage where we have become self-evolvers. To transcend ourselves is imperative in order to survive. We must develop the "ability to live in constant change", thus actualizing to an ever larger degree our inner programme and latent potential. Enhancement of creativity, feedback and flow-forward on all levels, research into the future, and model societies where we learn to live à la tomorrow, help us to participate in the building of our common destiny.

These four traits, explicitly or implicitly pervading *Emergent Man*, constitute the matrix originating the many particular proposals, productive discoveries and actions which only a detailed study of the book can reveal. In the short span of its pages a multi-embracing and wide-expanding network is condensed on a single monitor: much in little.

All who aspire to participate in the shaping of our human destiny will enjoy reading *Emergent Man* and profit from its rich illustration of Western science's attempts to contribute to world union. To "metaphrase" Oliver Reiser: *Homo Integralis* is on his way, and after he arrives—*supra hominem*, beyond man!

Alexander Brodt

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FOCUS

PLANETARY CITIZENS

*The world is held in trust by the people who inhabit it.
We have the responsibility to care for it, shape it, nurture it.*

—from "A Human Manifesto"

Donald Keys, the registrar for Planetary Citizens, has sent us information about this organisation, and we wish to share it with our readers. The material which follows is excerpted from the literature received, but "A Human Manifesto" is quoted in full.

One Earth, One Humanity, One Destiny

Planetary Citizens come from all walks of life—workers, statesmen, executives, astronauts, philosophers, homemakers, government officials. They come from all parts of the world. They share a global view which goes beyond racial, religious and political beliefs.

The organisational purpose of Planetary Citizens is threefold: (i) To achieve universal recognition by individuals that each of us is a citizen not only of our countries, but also of the planet earth. Planetary Citizens declare their allegiance to the oneness of the human family and claim their rights to a just world order by signing the pledge and registering as Planetary Citizens. There is no conflict with present allegiances to individual countries. (ii) To serve as an international network through which the unified thoughts and actions of Planetary Citizens are effectively working against such common threats as hunger, war, overpopulation and pollution. Planetary Citizens believe we can no longer remain passive observers as common dangers threaten us all. They actively seek ways to fulfil their obligations to the human family—both in their daily lives and in concert with the global community of Planetary Citizens. (iii) To provide a focus of energy, guidance and enlightenment that will help individuals everywhere to preserve and improve the quality of life. Planetary Citizens invest a portion of their resources—time, energy, money—to develop new and better images of human conduct in order to build a new and better world.

The Planetary Citizens organisation is functioning as an agent of change and transformation. The great thrust of its activities is to articulate, to educate, to persuade, to bring forth the global realisation of one human family.

To this end, large Planetary Citizen celebrations are programmed and promoted in major cities. Planetary Council meetings of world moral and intellectual leaders are being planned

to make recommendations to the world's governments. Educational programmes, motion pictures, and resource sheets profiling current critical world problems are produced and distributed to schools and to members. A Council of Elders and a Parliamentary Council are being developed to make recommendations on world disarmament, world economics, poverty, pollution, and human rights to the United Nations and to national governments.

Planetary Citizens is an idea whose time has come. Participation by everyone is urgently needed in the cause of human unification.

A Human Manifesto

Part of the effort to help make the earth a better place to live resulted in the issuance of a manifesto, by 160 prominent people from 30 countries, which reads:

Human life on our planet is in jeopardy.

It is in jeopardy from war that could pulverize the human habitat.

It is in jeopardy from preparations for war that destroy or diminish the prospects of decent existence.

It is in jeopardy because of the denial of human rights.

It is in jeopardy because the air is fouled and the waters and soil are being poisoned.

It is in jeopardy because of the uncontrolled increase in population.

If these dangers are to be removed and if human development is to be assured, we the peoples of this planet must accept obligations to each other and to the generations of human beings to come.

We have the obligation to free our world of war by creating an enduring basis for worldwide peace.

We have the obligation to safeguard the delicate balances of the natural environment and to develop the world's resources for the human good.

We have the obligation to place the human interest above the national interest, and human sovereignty above national sovereignty.

We have the obligation to make human rights the primary concern of society.

We have the obligation to create a world order in which man neither has to kill or be killed.

In order to carry out these obligations, we the people of this world assert our primary allegiance to each other in the family of man. We declare our individual citizenship in the world community and our support for a United Nations capable of governing our planet in the common human interest.

This world is held in trust by the people who inhabit it. We have the responsibility to care for it, shape it, nurture it.

Life in the universe is precious. It must be protected, respected, cherished.

We pledge our energies and resources of spirit to the preservation of the human habitat and to the infinite possibilities of human betterment in our time.

The Great Awakening

Humans are relatively new as the dominant inhabitants on earth. We have been building cities for only about ten thousand years—a moment of time in the evolution of life. Mankind, itself, is still evolving. "The power which resides in him is new in nature," wrote Emerson, "and none but he knows what that is which he can do, nor does he know until he has tried."

Today, the human race faces an urgent need to take the next great step in its development. The invisible walls of time and space no longer separate Europeans, Asians, Americans, Africans, Russians. The development, problems and threats of one are increasingly affecting us all. A drought plagues the wheat fields of Russia—and Americans pay higher prices for bread. Atomic reactors arrive in the Middle East from America and France—and millions of people view the promise of better living at the same time that they worry about annihilation.

The neural fibres of daily life now link the great body of humanity. The pain or pleasure of one affects the well-being of the whole. The logic is inescapable. We can no longer afford to ignore the conditions of each other. Plainly, an overall guiding concern of the parts must emerge if the whole is to function in harmony.

Today a great awakening is taking form in the world. We are now crossing a threshold between our past national awarenesses and an emerging planetary consciousness. We are now moving into the planetary age. In our quest to walk on the moon, we also—for the first time in human history—saw our planet from outer space. In an instant of space exploration, we became increasingly aware that life is precious in the universe. And somehow, we began to see the inhabitants of the earth as one family—no longer "we and they"—but interdependent.

The Organisation Itself

The concept and feeling of global oneness—of mutual brotherhood and interdependence among all human inhabitants of the earth—is generally accepted. Almost spontaneously, the need was recognised by concerned people in many countries: the human family must find a way to work together if human life on earth is to be preserved and improved.

Planetary Citizenship is developing rapidly today on an international scale. For those actively seeking for ways to help, Planetary Citizens is functioning as a major resource in world community. It is a place to learn, to join energies with others, to help groups and individuals alike get started with their projects. There is nothing else quite like it in human history. We are crossing a threshold in human development.

Planetary Citizens publishes a newsletter which reports events helping the development of planetary consciousness. The newsletter also refers to organisations working in that direction, and discloses Planetary Citizens' initiatives for future action in all the fields of life which generally affect the human family.

A member of Planetary Citizens recognises his membership in the human community, his allegiance to mankind, while he reaffirms his allegiances to his own community, state

and nation. As a member of the planetary family of mankind, the good of the world community is his first concern. Therefore he pledges to work to end divisions and wars among people; to work for the realisation of human rights—civil and political, economic, social and cultural—for all people; to work to bring the actions of nations into conformity with the world community; to work for the strengthening and improvement of the United Nations; to work to give the United Nations the authority to act on behalf of the common will of mankind in curbing the excesses of nations and meeting the common global dangers and needs of the human family.

One can register as a member of Planetary Citizens by endorsing the Pledge of Planetary Citizenship. Registration is free, but a \$3.00 contribution will cover the costs, and \$5.00 more subscribes one to the quarterly newsletter. Their address is: Planetary Citizens, 777 United Nations Plaza, New York City 10007, U.S.A.

ORGANISATIONAL ACTIVITY

World Union Centres

Calcutta During the past few months this centre has established a youth wing, a study circle, and a research centre; and it intends to begin a relief society to help the poor, a women's wing, and cultural, literary, dance, drama and music centres. It is a small centre of twelve persons at present, but approaches work with the attitude that each person will be fully involved. Twelve industrious, dependable persons is a considerable force that even larger centres would be happy to have.

In the May meeting on the 15th, Calcutta joined with other centres in working support of the new World Union Cultural and Economic Council (reported below), and hosted the visit of Dr. Kamooben Patel of the International Centre. She discussed financial aspects of the coming January triennial conference, *The Next Future*, with them.

In an earlier meeting, Sri Lakshmi Narayan Datta led a thoughtful and interesting discussion on the community activation of Sri Aurobindo's and the Mother's ideals in the Sri Aurobindo Ashram and Auroville, and the influence sent out by them for nourishment of human unity amongst the different races, nationalities and religious groups in the world. In the discussion they came upon an image of the great force or power which regulates the entire universe while it simultaneously influences individuals in their works and activities: a mighty wave arriving from the depths of the ocean, its energy might be stored and constrained, there might be frequencies of high and low profile, but the power could not be stopped—a seeming recess or deadlock would only be momentary. It was felt this described the massive working process toward world unity.

Chakradharpur In a combined effort with Sri Aurobindo Society's local centre, Chakradharpur Centre organised a two-day gathering on the anniversary of the Mother's final arrival in Pondicherry, 24 April. The focus was on education. During the first day, middle-school students and teachers met with Sri Samar Basu on how to create a beneficial atmosphere by group meditation at the outset of each morning. The second day attracted students and teachers of the girls' high school for a discussion of five principles of education as

applied in the Sri Aurobindo International Centre of Education. In the evening, boys of the two centres performed physical drill routines, gymnastics, and raced over hurdles before a large local crowd.

Cultural and Economic Council, Calcutta In their meeting on 15 May, it was announced that the Council has three working divisions: cultural, economic, and relief and social welfare. Their maxim is "selfless work, united endeavour, dedicated to the Divine—lead to world unity and peace". Initially, the Council will work in West Bengal in three regions; later, funds and organisation permitting, the effort will be made national. The three regions include the southern one in the district of 20 Parganas and Calcutta, the central region in Birbhum District near Bolpur (Santiniketan), and the northern region in Darjeeling District near Siliguri.

General Secretary Chuni Lal Goswami reported that World Union Udayan-Kalyan Centre offered ten bighas (about seven acres) of land near Bolpur to the Council, and another four bighas (about two and two-thirds acres) were extended by a generous citizen of Bolpur.

India Centre, Bangalore The newly formed World Union India Centre has recently mailed a letter and questionnaire which it says will be received by all World Union members in India. Nevertheless their communication is summarised here for all readers.

The questionnaire is intended to provide the basis of information for planning the Centre's work of national integration, and consequently poses four decisive queries. The reader's opinion is asked about eleven suggested methods to achieve national integration—spiritual, scientific, cultural, religious, economic, educational, legal or judicial, parliamentary and those of tourism and sports. Any other methods the reader might suggest are asked for, completing a very thorough approach. Other questions ask the reader's conception of national integration, what its scope should be, and what existing groups—national movements, institutions, organisations—could be utilised in this work. The covering letter simply but consummately introduces World Union to those who are unfamiliar with it or with World Union India Centre.

North Calcutta Unusually interesting events in their May meeting, held on the 20th, were a tape recorded composite programme on the motif of renascent India, edited by Sri Sujit Kumar Palit from the writing of Rabindranath Tagore and Sri Aurobindo.

In their study circle of June 12th, the subject was "Money, Wealth and the Future Economy"; "Future Arts and Literature" was discussed in the previous one.

Rishra This centre reports a 13 May meeting which absorbed the full day. In addition to the occasion for concentration and music, dissertation and discussion, a post-lunch consultation was held by Sri Samar Basu with boys and teachers of the village locality on educational matters.

Uttarpara Their monthly seminar of 5 June was well attended by educators, students and intellectuals participating in the discussion on Sri Aurobindo's contribution to yoga, education, art, literature and economics. It was led by Sri Samar Basu. An earlier seminar, on 30 May, was conducted jointly by the youth and women's wings.

New Centres

World Union *Lucknow* Centre, "Panchava", B 23 Sector "A", Mahanagar, Lucknow 226006. Chairman: Dr. R. V. Singh, vice chancellor, Lucknow University; vice-chairman: Dr. K. Sabbarwal, principal, Mahila Mahavidyalaya; general secretary: Dr. Sitaram Jayaswal, reader in education, Lucknow University.

This centre, founded largely through the efforts of Sitaram Jayaswal in mid-February, held its first meeting on June 3, 1976, when the officers were elected. Monthly meetings were decided upon, particularly for students and teachers of this educational centre of Uttar Pradesh, in which the problems connected with communal and social harmony, as well as national integration, will be explored.

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Associate Life Members

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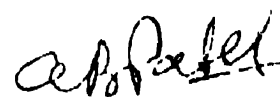
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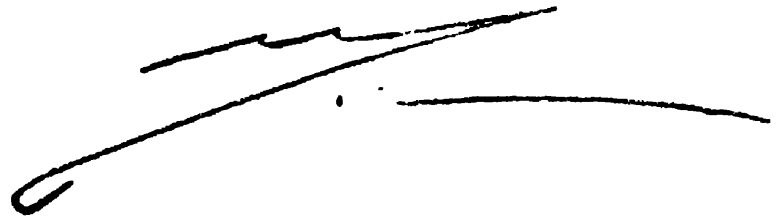


General Secretary

14 June 1976

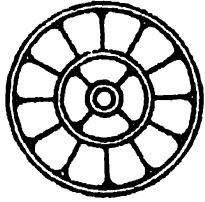
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an endless progress.*

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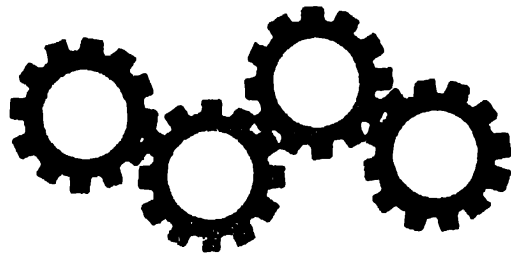
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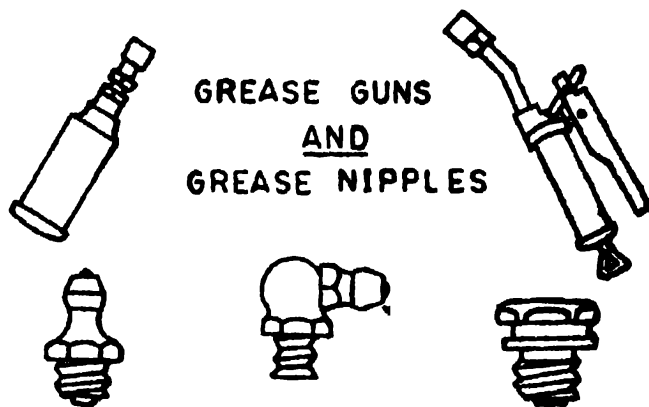
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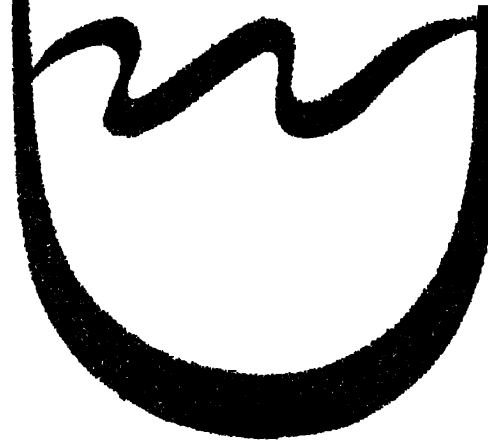
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EDITORIAL

A Bicentennial Promise

In entering its third century of existence, the United States of America has reason to look at its past with pride and to the future with confidence. For, the peoples who migrated to the American continent from Europe and elsewhere have on the whole prospered well, more than well. They have shown a commendable pioneering spirit and strength of will; from what was an almost undeveloped land they have erected a mighty civilisation and within two centuries have established themselves as the foremost power on Earth, with untold resources—material, vital, and mental. If humanistic values are still upheld in this age of cynicism and realpolitik, much is due to their aspirations and efforts. Despite a recognised immaturity in certain areas—understandable in view of the youth of the nation—the U.S.A. is the one country where people continue to believe in the future of man, where talent is always welcome from any quarter, where the persecuted can always hope to find asylum, and where the questing eye always looks forward.

Go West young man, was the call during the early decades of exploration and colonisation of the American continent. The last frontiers of the West were reached and inundated with the human spirit. *Go upward*, was the imperative in the last decade. This too was answered, with an American the first to walk on the moon. The second motto has revealed a third without which it is found to be empty: *go within*. And America is ready for this task also. The country is looking in all directions for the requisite knowledge. India and other nations who have garnered the treasures of the inner kingdoms and the higher realms of consciousness have a sacred responsibility to this young people who look with genuinely childlike trust to the elder cultures. It would be easy to exploit this trust, but true India will not. That India welcomes the opportunity to serve this aspiring people with humility and responsibility. Properly guided and assisted, the United States can well prove to be as daring and intrepid an adventurer in the realm of the Spirit as in the material. The earnestness with which American scientists and thinkers pursue their enquiry into areas of the super-conscious is a happy sign. No single country today is seized so much by the urgency of the exploration of consciousness as the United States. The dawn of the Spirit may well have been in the East, but the noon promises to be in the West, and that too in America.

M. P. P.

THE EMERGING PERSON: A NEW REVOLUTION

Carl R. Rogers

The Present Picture

That portion of Western culture which has developed in the United States appears to be in a process of decline and decay. Possibly the most important symptom of this is the growing belief of the people that they are unable to govern themselves—an increasing disbelief in the democratic process. Our cities are widely regarded by their citizens as ungovernable by elected officials. The rights and responsibilities of the citizen are no longer held precious. The Bill of Rights to our Constitution would almost certainly be defeated today if put to popular vote. Cynicism runs deep in regard to government and all its members. The distrust is reciprocated. Our government has a profound distrust of its citizens. There has been a steady drift toward a police state, in which force is the ultimate authority. As is clearly shown in the recent exposé of our federal power elite, the policy has been to use lies and deceit, criminal invasion of privacy, flouting of the law, the surveillance harassment and imprisonment of dissenters, to control the populace. Our foreign policy too indicates that we are but one step away from totalitarianism. It is dominated by the belief that "might makes right". In both undeclared and secret wars, bombing of defenseless peoples with no regard for their human or political rights is regarded as a suitable road to our diplomatic goal of so-called "peace".

But it is not in government alone that we see the rot. Other institutions too are in

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decay. The churches ceased some time ago to have a significant societal influence. The family as an institution is in a state of disarray and confusion, with, in a great proportion of marriages, spouse alienated from spouse, and parent from adolescent.

As to the school, our public educational system is, by and large, ossified, failing to meet the needs of society. Innovation is stifled, and innovators squeezed out. In a rapidly changing world faculty members and their governing boards—whether local school boards or college trustees—tend to cling tenaciously to the past, making only token changes. It is probable that our schools are more damaging than helpful to personality development and are a negative influence on creative thinking. They are primarily institutions for incarcerating or taking care of the young, to keep them out of the adult world.

Economically, the picture is bizarre. The wealthiest nation in the world is said to be unable to afford proper health care for its people. The efforts to eliminate poverty are themselves being eliminated, while the top 8 percent of the populace receives more income than the bottom 50 percent. This gap between the rich and poor in this country, and between the rich nations and poor nations in the world grows steadily wider. Great corporations have an inordinate influence on our government and on our life, and even presumptuously interfere in the affairs of foreign countries. High office now goes preponderantly to men of wealth, so that of our 100 senators, supposedly representing the people, forty are reported to be millionaires. The ordinary person has sensitive and compassionate representation neither in the corporation for which he works, nor in the government which rules him.

There are other signs of the times. As a people we lack any unified purpose, or perhaps any sure individual purposes at all. The alienation of youth from our culture is a matter of deep concern to many. The tendency of the individual and the group to use violent and criminal acts to serve all purposes, promote all causes, achieve all ends, is clearly evident. Here the people appear to be following the model set by the government.

So we have every reason to doubt whether our culture can survive. Sometimes it seems the only question is whether we will commit world suicide with the bomb, or simply decay until world leadership is taken over by other hands. It is not a pretty picture.

Some Brighter Views

But one lesson I have often learned in my garden is that the brown and rotting mess of this year's plant is a mulch in which next year's new shoots may be discovered. So too, I believe that in our decaying culture we see the dim outlines of new growth, of a new revolution, of a culture of a sharply different sort. I see that revolution as coming not in some great organized movement, not in a gun-carrying army with banners, not in manifestos and declarations, but through the emergence of a new kind of person, thrusting up through the dying, yellowing, putrefying leaves and stalks of our fading institutions.

More than four years ago I gave a very short, brash talk on "The Person of Tomorrow". I did not submit it for publication because I felt very unsure of my perceptions of this new person, and whether indeed he was emerging, or whether he was simply a wild fantasy of my own. But since that time my experience has only confirmed what seemed then to be a far-out thesis. Also, encouragingly for me, there has been a spate of books, from widely

different sources, each from its own perspective seeing our culture undergoing some sort of drastic change, and producing a type of individual, a type of consciousness, a way of being and behaving, which will reshape our world. We have a solid medical scientist, Rene Dubos (1972), emphasizing that man's very makeup means that the future belongs to the "unique, unprecedented, and unrepeatable person", and that "trend is not destiny". We have a poetic journalist-educator, George Leonard (1972), setting forth an almost ecstatic vision of the human species undertaking "an awesome journey into a higher state of being", a transformation he regards as inevitable. We have, from a very different vantage point, philanthropist-financier John D. Rockefeller 3rd (1973) picturing the second American Revolution already in progress, caused partially by our much sharper and clearer awareness of ourselves and our world, and leading to a humanistic fulfillment of the American dream. A philosopher-psychologist, Thomas Hanna (1970), writes what is essentially a hymn to the wholeness of the pulsing, growing human soma—body and mind united—and to the new human mutants who are living that realization, leading us toward a new goal. A noted microbiologist, Jonas Salk (1972, 1973), leads us through his biological perspective to see an intellectual and spiritual evolution of man's unfolding potential. The Stanford Research Institute, through its social policy center, has issued an exhaustive report which asks how we may "facilitate the emergence of new images" of man, convinced that we must have a new and more adequate image if we are to survive (Markley and staff, 1973). Two psychologist-educators, Fred and Anne Richards (1973), state the theme of their book in their one-word title, *Homonovus*, the new man. A far-out young medical researcher, Andrew Weil (1972), builds a case for this new man by pointing out the advantages of intuitive thinking—the natural mind—based on unconscious factors and altered states of consciousness, over the conventional rational thinking of the average man and the academic. Provocatively he points out that the future will belong to "stoned" rather than to "straight" thinking (though by "stoned" he does not imply drug-induced). A novelist, Joyce Carol Oates (1972), writes an essay about our "crisis of transition" where she sees the end of the Renaissance, as man evolves into a "higher humanism". She uses what I regard as a marvelous quotation from Sir James Jeans, the physicist-philosopher. It expresses a theme which runs through all of the writers I have mentioned, who seem to be tolling the knell of a narrowly mechanistic view. Jeans says: "the universe begins to look more like a great thought than like a great machine".

A New Configuration

I have given some snapshots of recent thinking about man as he will be—and other examples could be given. At any rate, such a diversity of strangely convergent perceptions of the future have emboldened me to present with more confidence—and with, I hope, more depth—my view of the radical new budding of persons which may change the fundamental nature of our society.

I should stress that what I will say is based on wide personal observation, on interactions with diverse individuals and groups, on my reading. It is an informal speculation, with all the possibility of bias and error that that phrase implies. It is not empirical science,

nor is it intended to be, though I hope it may contain some elements of observation which will inspire further study.

It springs primarily from my experiences with what I have come to think of as new persons. Where have I found them? I find them among corporation executives who have given up the gray-flannel rat race, the lure of high salaries and stock options, to live a simpler life in a new way. I find them among long-haired young men and women who are defying most of the values of today's culture to form a counter culture. I find them among priests and nuns and ministers who have left behind the dogmas of their institutions to live in a way that has more meaning. I find them among women who are vigorously rising above the limitations which society has placed on their personhood. I find them among Blacks and Chicanos and other minority members who are pushing out from generations of passivity into an assertive, positive life. I find them among those who have experienced encounter groups, who are finding a place for feelings as well as thoughts in their lives. I find them among creative school dropouts who are thrusting into higher reaches than their sterile schooling permits. I realize too that I saw something of this person in my years as psycho-therapist, when clients were choosing a freer, richer, more self-directed kind of life for themselves. These are a few of the places in which I have glimpsed something of this emerging person.

Though the sources of my perceptions are incredibly diverse I find a certain unity in the individual I am perceiving. The configuration seems similar, even though there are many minor differences. He (or she)—I wish someone would provide us with a bisexual set of pronouns—presents a new face to the world, a pattern of person which has not, in my judgment, ever been seen before, except perhaps in rare individuals. I would like to mention a number of the qualities of this multifaceted person, beginning with two which seem to be most prominent and most significant.

Desire for Authenticity

I find this person first of all to have a deep concern for authenticity. He values communication as a means of telling it the way it is, with feelings, ideas, gestures, speech, and bodily movement all conveying the same message. He has been brought up in a climate of hypocrisy, deceit, and mixed messages, and he is sick to death of doublethink and double-talk. He knows the falsehoods and guile of Madison Avenue. He has heard consciously deceitful statements from "the highest official sources" in our government. He has observed the word "peace" used to mean "war", and the phrase "law and order" used to mean "repression of dissent by illegal means". He has listened to the double messages of his parents and his teachers. All of these add up to the admonition, "Don't watch what I am or what I do; listen to what I say." He rejects this hypocritical culture which he sees, and longs to establish interpersonal relations in which communications are real and complete, rather than phony or partial. He has made astonishing progress in this respect. He is open, for example, about his sexual relationships rather than leading a secretive or double life. He confronts parents, teachers, government officials with his views, rather than giving a false impression of agreement. He is learning to handle conflict, even in organizations—how to carry on

continuing relationships in a climate of trust built on openness, rather than on a basis of facade. He is "for real".

So we have a highly honored young man, in his commencement address to the Harvard Law School, telling the assembled faculty and parents that "You have told us repeatedly that trust and courage were standards to emulate. You have convinced us that equality and justice were inviolable concepts. You have taught us that authority should be guided by reason and tempered by fairness. *We have taken you seriously.*"

He goes on to tell how, accepting those principles, students have worked for civil rights, labored in rural and urban ghettos, called attention to the injustices of the war in Southeast Asia. "Now, for attempting to achieve the values which you have taught us to cherish, your response has been astounding", referring to harassment and violence against such young people. "When this type of violent repression replaces the search for reasonable alternatives Americans are allowing their most fundamental ideals to be compromised."¹ He is challenging our two-faced culture.

We have an equally high-ranking woman student informing the commencement audience at Mills College that she does not intend to bring children into this modern world—because it is not a fit place. Such candor is unprecedented.

We have a B52 pilot refusing an order to fly further bombing missions over a neutral country, risking court-martial, and saying, "To act as I was acting and to claim the moral convictions I was claiming was the highest form of hypocrisy." He takes full personal responsibility for flying the missions, even though he was acting on orders relayed from his commander-in-chief.²

Such painful honesty, such willingness to confront, and the willingness to pay the price of such utterances, are indications of the value this emerging person places on being authentic, even in situations where tactful generalities have always been the tradition.

Institutions Exist for People

One of the deepest antipathies of this individual is directed toward institutions. He is opposed to all highly structured, inflexible, bureaucratic institutions. He believes firmly that institutions exist for persons, and not the reverse.

One of the most striking cultural events of our time is the decline of the power and authority of the institution—in government, the military, the church, the corporation, the school. This is certainly due in part to the attitude of the new emerging person. He will not put up with order for order's sake, form for form's sake, rules for the sake of having rules. He questions every aspect of formal structure and discards it unless it serves a human purpose. He questions every inflexibility of any sort, with the belief that rigidity cannot serve the changing human being.

His beliefs on this score are not idle talk. He will leave an institution rather than give in to what to him are meaningless dictates. So faculty members drop out of universities,

1. Meldon Levine, commencement address to Harvard Law School.

2. *Los Angeles Times*, July 28, 1973, p. 3.

students out of colleges, doctors out of the American Medical Association, priests out of their churches, executives out of corporations, Air Force pilots out of bombing groups. The list goes on and on.

Many of these actions are taken quietly, without fanfare. The institution of marriage is being deserted by thousands of couples, both young and middle-aged, who have chosen to ignore customs, ritual, and law, to live together as partners without the sanction of marriage. This is done openly, but without defiance. These couples simply believe that a partner relationship has significance only if it is a mutually enhancing, growing, relationship. It has, in their minds, little to do with marriage as a ceremony, or as a legal step, and they simply disregard the traditional rules.

Or another instance of the attitude toward institutions is contained in a survey of Catholic wives. Of those under the age of 30, over 75 percent are using methods of birth control which the church disapproves. To the best of my knowledge there have been no demonstrations against the pope's 1968 encyclical. There is no wave of protest. These women are simply disregarding the institutional pronouncements, and acting in ways that they see as best for persons, not for the structure. It is one more of the many instances which could be given.

What will take the place of the institution for this new person? It is too soon to say. One trend that I see is toward small, informal, non-hierarchical groups. Students and faculty have started 500 "free schools", informal, often short-lived, decidedly unstructured, full of excitement and learning. A graduate school of high standards (Union Graduate School) permits a student to achieve a doctor's degree through an honest program of independent study by the student, advised and aided by a group of his faculty and peers. It is swamped by an incredible number of applications, and has attracted the highest type of true scholar, but it is keeping itself small. Business executives who have "dropped out" start personal enterprises limited in size, in which relationships are direct and face-to-face, rather than at second hand—or fifth hand. Persons of all types join communes, where the relationships are highly personal, and structure and authority are called into being only to accomplish a specific purpose. Some new professional groups, like the center to which I am privileged to belong, are primarily bound by a close sense of community, with no lasting lines of authority, and no desire to expand in number, but carrying on diverse and creative projects in highly effective ways.

Another trend is to humanize the institution from inside, simply disregarding meaningless rules. Thus factory assembly line workers disregard their assigned, routinized jobs, and form teams in which they trade off jobs, handle two jobs at a time, and in other ways pronounce, by their actions, that they are self-directing persons whose interests come first, not cogs in a great technological wheel.

In government and politics too—that quagmire in which so many men have sunk—some are endeavoring to take a human approach. Here is a successful state legislator writing to his constituents to say that "institutions must become life-oriented rather than death-oriented That persons in politics be committed to . . . self-realization rather than self-denial." He continues, "Increasingly I come to realize that the discovery of a new politics for our

culture depends upon my living and experiencing and discovering a 'new politics' within myself—getting so much in touch with all the parts of my own being, that out of the resultant oneness within me, I will increasingly live disclosingly so as to expose the institutions and customs of our culture which stand in the way of oneness—within ourselves, between ourselves, between us and the earth" (Vasconcellos, 1972).

This is indeed a fresh breeze in the political world—an authentic *person* seeking electoral support, getting it, and changing a time-honored institution from the inside.

This second characteristic of the emerging individual—giving priority to the human person over the institution—is then highly pervasive, affects all organizations, and forecasts, in my judgment, a radical reevaluation of structure in our society.

Other Qualities

There are other qualities which I find in this emerging person. I will point to them briefly.

The Unimportance of Material Things

He/she has a fundamental indifference to material comforts and rewards. Though accustomed to an affluent society, and quite willing freely to use all kinds of machines, comforts and luxuries, none of these are necessary to him. Blue jeans, a sleeping bag and a hamburger are valued as much as—and sometimes more than—expensive clothing, fine lodging, and gourmet food. These material elements are entirely secondary to his main purpose. We find corporate executives who have become very comfortable as chicken farmers, or ski instructors, because they prefer those lives. We find young people with no interest in accumulating money, but only in using money for constructive personal or social uses. Money and material status symbols are no longer the primary goal of such persons.

A Non-moralistic Caring

This person is a caring person. He has a deep desire to be of help to others, to his "brothers and sisters", and to society, when its need for help is clear. He is, however, definitely suspicious of the "helping professions", where "shrinks", social workers and drug counselors earn their livelihood by offering help for pay, and too often hide behind a professional facade. He tends to take a more direct route. Young men and women man "hot-lines" to aid those in crisis, and they do it voluntarily. They share food or lodging without question. When "straight people" are in emergency situations, they respond. In the floods along the Mississippi, long-haired young men and women rushed in, sometimes from hundreds of miles away, to fill sandbags, shore up levees, take care of families. And in all of this, financial compensation is a nonexistent or very minor consideration.

The help so freely given by this emerging person is a gentle, subtle, non-moralistic caring. When a person is helped down from a bad drug trip, the touch is soft and supportive, without overtones of preaching. When an individual is caught in a crime he is helped, not lectured or hassled. This person is acceptant of the individual in distress, with an awareness that the roles might easily be reversed. He flies in the face of the modes of "helping"

most popular in our culture—the diagnostic, evaluative, interpretive, prescriptive, and sometimes punitive approaches.

The Wish for Intimacy

This person is seeking new forms of community, of closeness, of intimacy, or shared purpose. He is seeking new forms of communication in such a community—verbal and non-verbal, feelingful as well as intellectual. He recognizes that he will be living his transient life mostly in temporary relationships and that he must be able to establish closeness quickly. In his mobile world he does not live long in one community. He is not surrounded by family and relatives. He is a part of what Bennis and Slater (1968) call the temporary society. So he realizes that if he is to live in a human context he must be able to establish an intimate, communicative, personal bond with others in a very short space of time. He must be able to leave these close relationships behind, without excessive conflict or mourning.

A Scepticism about Science

One attitude held by this emerging person runs strongly counter to the prevailing view of the current and past decades. It is his deep distrust of a cognitively based science, and a technology which uses that science to conquer the world of nature and the world of people. He no longer trusts the abstractions of science, or the uses to which they are put. He has an intuitive belief that significant discoveries and learnings involve feelings. He is not especially thrilled by the space program, questioning the littering of space and of the moon with priceless "junk". He thinks that technology should exist for some purpose other than conquest.

One of the manifestations of his distrust of science as we have known it is his interest and belief in the occult, in astrology, in the I-Ching, and in Tarot cards—the "sciences" of the past. But he has also been more than willing to engage in modern science and technology when he is convinced these serve human purposes. His expertise in electronics as a means of creating and transmitting music is obvious. His eagerness to use biofeedback as a means of enlarging his self-awareness, and to bring changes in his behavior, is another instance of this willingness.

His general distrust of scientific "progress" should not be misinterpreted. He is not dogmatic. He is eager to find truth. He is a searching person, without any neat answers. The only thing he is certain of is that he is uncertain. He is sharply aware of the fact that he is only a speck of life on a small blue and white planet (whose days may be numbered) floating in an enormous universe. He is, like many previous searchers, uncertain as to whether there is a purpose in this universe, or only the purpose he creates. He is willing to live with this anxious uncertainty as he, in his own way, strives to learn more of the two universes, outer and inner.

The Universe Within

For another characteristic of this person is his clear desire to explore inner space. He is more willing than previous man to be aware of himself, of his own feelings, of his "hang-

ups". He is able to communicate with himself more freely, with less fear. The barriers of repression, which shut off so much of man from himself are definitely lower in him than in preceding generations. He is a highly aware person.

This willingness to look within has led him into many new areas—drug-induced states of altered consciousness, a fresh interest in dreams, the use of a variety of types of meditation, a concern with all types of psychic phenomena, and interest in esoteric and transcendental religious views. He is convinced that within ourselves lie undiscovered worlds and hidden capacities—that daydreaming, fantasy and intuition are but gateways to much more. To him cosmic consciousness, thought transmission, Kirlian auras given off by living things, are not the ravings of "weirdos". He regards them as within the bounds of possibility, and he is not afraid of upsetting a conventional world view by exploring them.

In Balance with Nature

This person feels a closeness to elemental nature. He has a respect for nature and its ways, and is relearning the lessons of ancient tribes on how to live in a balance of man's mutuality with nature, each sustaining the other. In his recreation, the surfboard, the ski, the sailboat, the glider are more symbolic of his interests than the speedboat, the dune buggy, or the racing car. The first cluster bases its excitement on a thrilling *alliance* with natural forces—waves, snow-covered slopes, the wind and its air currents; the second on the determined conquest of nature, with destruction and pollution as results. In his respect for nature this new person has rediscovered the value of patiently waiting upon the inhabitants of wilderness and desert in order to learn. We have men and women devoting long years of hardship to live with primitive tribes, or with gorillas, lions, chimpanzees, simply to learn from them. It is a new and respectful attitude, a more humble one.

A Process Person

He is a person who is aware that he is continually in process—always changing. In this process he is spontaneous, vitally alive, willing to risk. His likes and dislikes, his joys and his sorrows are passionate and are passionately expressed. His adventuresomeness has an almost Elizabethan quality—*everything* is possible, *anything* can be tried.

Because he is in process himself, he simply will not tolerate fixity. He can see no reason why rigid schools, glaring maldistribution of wealth, depressed ghetto areas, unfair racial or sexual discrimination, unjust wars, should remain unchanged. He expects to change these situations, and he wants to change them now, in human directions. I believe he is the first instance in history of man being fully aware that changingness is the one constant of life.

The Authority Within

This new person has a trust in his own experience and a profound distrust of all external authority. Neither pope nor judge nor scholar can convince him of anything which is not borne out by his own experience. So he often decides to obey those laws which he regards as sound and just, and to disobey those he sees as unsound and unjust, taking the consequences of

his actions. On a minor issue, he smokes marijuana because he believes the law unreasonable and unfair, and risks being "busted". On major issues he refuses to be drafted when he regards a war as reprehensible: he gives out "secret" government documents when he believes the people should know what has been going on: he refuses to reveal the sources of his news reports for the same reason. This is a new phenomenon. We have had a few Thoreaus but we have never had hundreds and thousands of people, young and old alike, willing to obey some laws and disobey others on the basis of their own personal moral judgment, and living with the consequences of their choice. He has a high regard for himself, and for his competence to discriminate in issues involving authority.

These are some of the characteristics I see in the emerging person. I am well aware that few individuals possess all of these characteristics, and I know that I am describing a small minority of the population as a whole. Yet these persons appear to me to be having an impact entirely out of proportion to their numbers, and this has, I believe, significance for the future.

Is this a Viable Person?

Certain questions may well be raised in regard to this emerging person. What is his chance of survival? What opposition does he, will he, meet? What will be his influence on our culture?

Antecedents

One line of thought which casts doubt upon his survival is a consideration of history. This emerging person bears little resemblance to the types of man who have shown survival qualities. He would not be congenial to the practical, disciplined, soldier-ruler produced by the Roman Empire. He bears little resemblance to the dichotomous medieval man—the man of faith and force, of monasteries and crusades. He is almost the antithesis of the Puritan man who founded our country, with his strict beliefs and strong controls over behavior. He is very different from the person who brought about the industrial revolution, with his ambition, productivity, greed and competitiveness. He is deeply opposite to the Communist culture with its controls on individual thought and behavior in the interest of the state. His characteristics and his behavior run strongly counter to the orthodoxies and dogmas of the major western religions—Catholicism, Protestantism and Judaism. He certainly does not fit into present day culture—its government and military and management bureaucracies, its rigid education. He is not at home in our present American society, dominated as it is by computerized technology and the man in uniform—the military, the police, the intelligence agent, and the faceless men in control.

Is there any parallel? During the brief flowering of Greek culture it was believed that the highest of art and ultimate justification of the community was to create a *man*, a person of human excellence. The emerging person would be rather congenial to that goal. He would also, I believe, be more or less at home in the world of Renaissance man, during another painful and exciting period of transformation. But clearly his characteristics have not dominated past history. If he survives he will be the exception and not the rule.

Opposition

The emergence of this new person will be opposed. Let me suggest his opposition by a series of sloganistic statements which may communicate something of the sources of antagonism.

First, "The State above all." The past decade has given us ample evidence that in this country, as well as in a majority of others, the governing elite and the massive bureaucracy which surrounds them have no place for dissenters, or those with different values and goals. The new person has been and will be harassed, denied freedom of expression, accused of conspiracy, imprisoned for unwillingness to conform. It would take a massive—and unlikely—awakening of the American public to reverse this trend. Acceptance of diversity of values and life-styles and opinions is the heart of the democratic process, but it no longer flourishes well here. So this emerging person will certainly be repressed, if possible, by his government.

Second, "Tradition above all." The institutions of our society—educational, corporate, religious, familial—stand in direct opposition to anyone who defies tradition. Universities and local public schools are the institutions likely to be the most hostile to this person of tomorrow. He does not fit their tradition and he will be ostracized and ejected whenever possible. Corporations, in spite of their conservative image, are somewhat more responsive to public trends. Even so, they will be in opposition to the person who puts self-realization ahead of achievement, personal growth above salary or profit, cooperation with nature ahead of its conquest. The church is a less formidable opponent, and family and marital traditions are already in such a state of confusion that the antagonism, though existent, is not likely to be effectively implemented.

Third, "The intellect above all." The fact that this emerging individual is attempting to be a whole person—body, mind, feelings, spirit, and psychic powers integrated—will be seen as one of his most presumptuous offenses. Not only science and academia, but government as well, are constructed on the assumption that cognitive reasoning is the *only* important function of man. One has only to read Halberstam's mind-boggling book to realize that it was the conviction of "the best and the brightest" that "sheer intelligence and rationality could answer and solve anything" (1972, p. 44). It was this belief that led us into the morass of Viet Nam. This same conviction is held by scientists, faculty members, and policy makers at all levels. They will be the first to pour contempt and scorn on anyone who by word or deed challenges that credo.

Fourth, "Man should be shaped." As the Stanford report points out, a vision of man may logically be extrapolated from our present technological culture. It would involve the application of social and psychological technology to control non-conforming behavior in the interest of a regulated post-industrial society. Such controls would be exercised not by some one institutional force but by what the writers term the "warfare-welfare-industrial-communications-police bureaucracies" (Markley et. al, 1973, xxi-xxii). It is clear that one of the first aims of this complex web, if this conforming image of man prevails, would be to control or eliminate the person I have been describing.

Not only may shaping be brought about by subtle coercive control, but even by the steady advance of scientific knowledge itself. The biologist and biochemist are learning the

possibilities of genetic shaping and of chemically induced alterations in behavior. These advances may, like social and psychological knowledge, be used as controlling or freeing potentialities. The physicists have long since lost their innocence in regard to the uses of their discoveries. The biological and psychological sciences are next. They too may easily become the tools of this massive bureaucratic complex in which movement toward control appears inevitable, with no one person responsible for any given step—a hydra-headed creeping monster which would engulf the sort of person I have described.

Fifth, "The status quo forever." Change threatens, and its possibility creates frightened, angry people. They are found in their purest essence on the extreme right, but in all of us there is some fear of process, of change. So the vocal attacks on this new person will come from the highly conservative right who are understandably terrified as they see their secure world dissolve, but they will receive much silent support from the whole population. Change is painful and uncertain. Who wants it? The answer is, *few*.

Sixth, "Our truth is *the* truth." The true believer is also the enemy of change, and he will be found on the left, on the right, and in the middle. He will not be able to tolerate a searching, uncertain, gentle person. Whether young or old, fanatic left wing or rigidly right wing, he must oppose the process individual who *searches* for truth. Such true believers *possess* the truth, and others must agree.

So, as this person of tomorrow continues to emerge into the light, he will find increasing resistance and hostility from these six important sources. They may very well overwhelm him.

What of the Future?

Yet, as history has shown many times, an emergent evolution is not easily stopped. This new person's arrival on the scene in greater numbers may be delayed by any one or all of the forces mentioned. The quiet revolution of which he is the essence may be slowed. He may be suppressed. He may have to exist only in an "underground". But a potent ferment has been let loose in the world by the qualities he exhibits. It will be difficult to put this genie back in the bottle. It will be doubly difficult because here is a person who *lives* his values. Such living of a new and divergent value system is the most revolutionary action a person can take, and it is not easily defeated.

Suppose then that he has an outside chance of coming into the light, of gaining influence, of changing our culture. What would the picture be? Is it as threatening or awful as many people might fear?

This emerging person would not bring Utopia. He would make mistakes, be partially corrupted, go overboard in certain directions. But he would foster a culture which would emphasize certain trends, a culture which would be moving in these directions.

Toward a non-defensive openness in all interpersonal relationships—within the family, the working task force, the system of leadership.

Toward the exploration of self, and the development of the richness of the total, individual, responsible human soma—mind and body.

Toward the prizing of the individual for what he *is*, regardless of sex, race, status, or material possessions.

Toward human-sized groupings in our communities, our educational facilities, our productive units.

Toward a close, respectful, balanced, reciprocal, relationship to the natural world.

Toward the perception of material goods as rewarding only when they enhance the quality of personal living.

Toward a more even distribution of material goods.

Toward a society with minimal structure—human needs taking priority over any tentative structure which develops.

Toward leadership as a temporary, shifting function, based on competence for meeting a specific social need.

Toward a more genuine and caring concern for those who need help.

Toward a human conception of science—in its creative phase, the testing of its hypotheses, the valuing of the humanness of its applications.

Toward creativity of all sorts—in thinking and exploring—in the areas of social relationships, the arts, social design, architecture, urban and regional planning, science.

To me these are not frightening trends but exciting ones. In spite of the darkness of the present, our culture may be on the verge of a great evolutionary-revolutionary leap. I simply say with all my heart—Power to the emerging person and the revolution he carries within.

References

Bennis, W. G., and Slater, P. E., *The Temporary Society* (New York: Harper & Row, 1968).

Dubos, R., *The God Within* (New York: Scribners, 1972).

Halberstam, D., *The Best and the Brightest* (New York: Random House, 1972).

Hanna, T., *Bodies in Revolt* (New York: Holt, Rinehart & Winston, 1970).

Leonard, G. B., *The Transformation: A Guide to the Inevitable Changes in Humankind* (New York: Delacorte, 1972).

Merkley, O. W., and staff, *Changing Images of Man*. Report prepared for the Stanford Research Institute, first draft, 1973.

Oates, Joyce C., "New Heaven and Earth", *Saturday Review* (November 4, 1972): 51-54.

Richards, F., and Richards, Anne C., *Homonovus The New Man* (Boulder, Colorado: Shields Publishing Co., 1973).

Rockefeller, J. D., 3rd, *The Second American Revolution* (New York: Harper & Row, 1973).

Salk, J., *Man Unfolding* (New York: Harper & Row, 1972).

Salk, J., *The Survival of the Wisest* (New York: Harper & Row, 1973).

Vasconcellos, J., *Communication to constituents* (1972).

Weil, A., *The Natural Mind* (Boston: Houghton Mifflin Co., 1972).

FOUR POEMS

a lone leaf like loose hair falls
in the midst of a thought
coming out of sitting in the woods.
silence you think but the sounds
of birds and flowers' growing pains
shriek into the air just beyond our
heads that are turned away from
each other.

dropping or falling
never to appear again
an autumn sunray

the sun becomes more of a dream
to me in winter
convincing only distant eyes to squint
I stare at the noon-day heavens

snow covers the trees
the morning wind is still
a red cardinal disappears

Michael D. Lies

Michael David Lies is a twenty-eight year old American artist. He has been painting for twelve years and has done fourteen commissioned works to date; his "Homage to Kohoutek" was recently exhibited at Pittsburgh's First Annual New Age Exposition. Mr. Lies is also active as a film-maker, having received a grant from the Hunt Foundation, and as a freelance photographer.

"GENUINELY HUMAN FREEDOM IS INNER FREEDOM"

Alexander Solzhenitsyn

I am deeply touched by your decision to present this award to me. I accept it with gratitude, and with a sense of duty before that lofty human concept that resounds, resides, and is embraced in the name of your organization—in the symbol uniting us here today. My word of reply will naturally be concerned with this symbol.

In a situation like this, it is easiest to give way to rhetoric on the dark abysses of totalitarianism and to sing the praises of the shining strongholds of western freedom. It is far more difficult, but also more productive, to take a hard look at ourselves.

If the region of free social systems in the world keeps shrinking, and if huge continents only recently obtaining freedom are being drawn off into the zone of tyranny, then the fault lies not just with totalitarianism—which devours freedom as a function of its natural growth—but, obviously, also with the free systems themselves which have lost something

of their inner strength and stability.

Your notions and mine about many events and facts are based on dissimilar life experience, and therefore may differ considerably. Yet the very angle between beams of sight may help us to perceive a subject in fuller dimensions. I make bold to direct your attention to some aspects of freedom that are not fashionable to talk about, but which will not on that account cease to exist, to have significance, and to have influence.

The concept of freedom cannot be grasped correctly without an appreciation of the vital objectives of our earthly existence. I am an advocate of the view that the aim of life for each of us is not to take boundless pleasure in material goods, but to take our departure from the world as better persons than we arrived at it, better than our inherited instincts would have made us; that is, to travel over the span of life on one path or another of spiritual improvement. (It is only the sum of such progressions that can be called the spiritual progress of humanity.)

If this is so, then external freedom is not a self-sufficient end of people and societies, but only a means facilitating our undeformed development; only a *possibility* for us to live a human and not an animal existence; only a *condition* in which man may better carry out his assignment on earth. And freedom is not the only such condition. No less than outer freedom, man needs unpolluted space for his

This is the text of remarks by Nobel Laureate Alexander Solzhenitsyn upon receipt of the American Friendship Award from the Freedoms Foundation on 1 June 1976 at the Hoover Institution, Stanford University. Solzhenitsyn's remarks were translated by Dorothy Atkinson, assistant professor of history at Stanford, for the university's Campus Report.

spirit, room for mental and moral concentration.

Regrettably, contemporary civilized freedom is reluctant to leave us this kind of space. Regrettably, in recent decades our very idea of freedom has been diminished and grown shallow in comparison with previous ages; it has been relegated almost exclusively to freedom from outside pressure, to freedom from state coercion—to freedom understood only on the juridical level, and no higher.

Freedom! to litter compulsorily with commercial rubbish the mailboxes, the eyes, ears, and brains of people, the telecasts—so that it is impossible to watch a single one with a sense of coherence.

Freedom! to impose information, taking no account of the right of the individual not to accept it, of the right of the individual to peace of mind.

Freedom! to spit in the eye and in the soul of the passerby and the passenger with advertising.

Freedom! for editors and film producers to start the younger generation off with seductive miscreations.

Freedom! for adolescents of 14 to 18 years to immerse themselves in idleness and amusements instead of invigorating tasks and spiritual growth.

Freedom! for healthy young adults to avoid work and live at the expense of society. Freedom for strikers, carried to the point of freedom to deprive all the rest of the citizens of a normal life, of work, of transportation, water, and food.

Freedom! for exonerating speeches, when the lawyer himself knows the guilt of the accused.

Freedom! to exalt the legal right of insurance protection so that even "good Samari-

tanism" can lead to extortion.

Freedom! for casual, trivial pens to glide irresponsibly over the surfaces of any problem, pushed forward in haste to shape public opinion.

Freedom! for the collection of gossip, while the journalist for reasons of self-interest spares compassion for neither his fellow man nor his native land.

Freedom! to divulge the defense secrets of one's country for personal political ends.

Freedom! for the businessman in any commercial transaction no matter how many people might be brought to grief, no matter how his homeland might be betrayed.

Freedom! for politicians indiscriminately to bring about whatever pleases the voter today, but not what farsightedly provides for his safety and well-being.

Freedom! for terrorists to escape punishment, so that pity for them becomes a death sentence for all the rest of society.

Freedom! for entire states to extort aid from outsiders as dependents, but not set to work to build up their own economics.

Freedom! as indifference to a distant, alien, trampled freedom.

Freedom! even not to defend one's own freedom: let some other fellow risk his neck.

All these freedoms are often irreproachable juridically, but morally all are faulty. In their example we see that the sum total of all the rights of freedom is still a long way from the Freedom of man and of society. It is merely potentiality being realized in different forms. All of this is a subordinate sort of freedom—not the type of freedom that elevates the human kind, but a precarious freedom which may actually be its undoing.

Genuinely human freedom is *inner* freedom, given to us by God: freedom to decide

upon our own acts, as well as our responsibility for them. And he who truly understands freedom is not the man who hurries to exploit his legal rights for mercenary advantage, but one who has a conscience to constrain him even in the face of legal justification. Not the man who scurries to cash in on a sure court case, but one who has the integrity to renounce it—and, moreover, to bring to public light his own missteps. That which was called in an age-old, and now quaint, word—*honor*.

I think it will not be too much for us to acknowledge that in some renowned countries of the western world in the twentieth century, freedom has been degraded in the name of "development" from its original soaring forms;

that in not one country of the world today does there exist that highest form of freedom of spiritualized human beings which consists not in maneuvering between articles of laws, but in voluntary self-restraint and in full consciousness of responsibility, as these freedoms were conceived by our forefathers.

However, I believe profoundly in the soundness, the healthiness of the roots, of the great-spirited, powerful American nation—with the insistent honesty of its youth, and its alert moral sense. With my own eyes I have seen the American country, and precisely because of that I have expressed all this today with steadfast hope.

THE ROYAL PYJAMA'D HORSE--VI

. Maggi Lidchi

It wasn't fair. How and why by all the feathered gods and goddesses had she given her feather to Chandrakant? True, he was the only one she had ever met who wanted it, but why did it have to be Chandrakant? And maybe the nasty idiotic little donkey was right after all. What *did* she want with a heart? Because if this was what you felt like with half a heart, my god, how did you feel with a whole one, a complete one? It would be the death of her. Not that there was really much chance of her getting a heart. And yet, thought Pomegranate, if that obnoxious little excuse for a horse suspected the truth, he might find a way of saying something nice just to nudge her that much nearer extinction.

Her gaze fell on Chandrakant sleeping. And Chandrakant sleeping wasn't as bad as Chan-

drakant awake. If she caught him just as he awoke, before he could recapture his normal vileness, he might, through sleep-blurred eyes, not notice the irritating missing feather and be surprised into saying something kind. She forgot her doubt and carefully preened and arranged herself on the branch so that the gap in her tail feathers could not be noticed. She even spread the remaining feathers in such a way as to cover it, and though it was a strain to hold them thus, it could be done. Then she turned her profile towards Chandrakant at the most flattering angle and held the pose.

She felt something rising within her, and though she did not recognise it she did know that she had never felt it before she had given her feather away. It was, in fact, hope, expectation. And she was glad, glad that she had given her feather away, and it was no longer even a strain to keep the gap closed. Once or twice she hopped a few centimetres to one side or the other on the branch to make sure that she would be the first thing Chandrakant saw on opening his eyes. But that was all.

Finally Chandrakant did open his eyes. At first he saw nothing. The blur was too thick. The pain which had slowed to a walk in sleep now began trotting. Then without going through a canter it broke into a gallop. He rubbed his eyes. There was the blur again and through the blur he saw the bird. He didn't notice the flattering profile nor that the gap was covered. All that he could see was the

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greediness in the eye waiting, waiting, waiting.

He raised his head a little which was a terrible thing to have to do, shrieked something awful and fell unconscious once more.

For a moment Pomegranate sat dead still, her feathers standing on end. Then she felt something like a blow which went straight to that new centre in her which a moment before had been palpitating with joyful anticipation.

She peered down at Chandrakant. He looked so awful that she wondered if he really were going to die. What was that he had screamed at her, "Drop dead"? In fact she wasn't sure he hadn't said something worse. But then he might have been calling for help in his hour of need. What if in her confusion she'd failed him at the crucial moment and he were dead?

"Pomegranate." A feeble croak; in any case he wasn't dead.

She looked down, realising as she shifted her eyes that she'd been gazing off into space for some time, half reluctant to disturb the numb peace which had slowly been filtering into her.

"Pomegranate", the croak came again, more desperate now.

"Oh really, don't you look strange Chandrakant", she said before she had time to think.

Something had happened to Chandrakant's beautiful stripes. They were all out of place, all wavy as it were.

"What do you mean?" he said weakly. The fight seemed to have gone out of him.

"I don't know. The stripes."

"What stripes?" Chandrakant's voice now carried a note of anxiety.

"Your stripes."

Pomegranate didn't know how to tell him that his face was all swollen, that there were

bumps all over, that he looked a little like the lumpy animal but that with stripes it was much worse and it made her head swim. So she said, "How's your head?"

"Terrible. And having to call you a dozen times didn't help. And seeing you . . ." He was speaking softly, but only, as Pomegranate very well realised, because speaking loudly caused pain. "I could have died while Madame Pomegranate sat absorbed in her meditations . . . ahhhhh" he groaned and let his head roll to the side. His voice had begun to rise.

"Shouting'll make it worse Chandrakant." There was a long silence. At last Chandrakant spoke. His voice came out hardly above a murmur.

"Pomegranate, I hate you in my life. Go away, as far away as possible. It's my only chance."

Pomegranate who wasn't used to Chandrakant's pleading tone, stuttered, "Getting better. Yes I suppose I could go away if that's what you really want." It was in fact what she really wanted too at the moment. The lure of acquiring a heart had palled considerably and, though she wouldn't have said it, Chandrakant did look most disturbing. There was no more unfortunate combination, she was obliged to admit, than lumps and stripes. No animal should have more than one at a time. It made the eyes of the observer swim. Even now she had to look at him out of half-closed lids in order not to topple off her branch.

"Shall I go?" she asked.

"Now."

"Immediately?"

He groaned. She flapped her wings in preparation for flight, wondering whether she should say goodbye, but just as she had decided to, Chandrakant raised his head and yelled, "Immediately!" She jerked off into a zigzag flight, her head swimming a little from

the wavy stripes, and she flew and she flew and she flew.

When her wings refused to carry her any further she sank panting into the greenness of the nearest tree and, without knowing why, started weeping great ugly greyish-maroon tears, the colour of old crusted blood, which nobody could by the remotest stretch of the imagination have mistaken for semi-precious stones, never mind jewels. Seeing these great ugly objects rolling down the green leaves Pomegranate hid her eyes under her wing in shame and eventually fell asleep.

When she awoke it was dark and the thing in her breast felt like a lump of dough. What had she wished on herself! Nothing, nothing in the whole world could be worse than this lump. And she suddenly thought of Chandrakant. To have so many lumps. She gave a little squawk of sympathy Chandrakant's face swam vividly before her, it really swam, for to her mind's eye the lumps had grown bigger and the stripes wavier. Chandrakant undulated so that she had to shut him out in order not to fall off her branch. But the image persisted behind her eyelids and she saw all too vividly that the lumps had spread right down to his shoulders, and his face looked enormous. Perhaps he had wave-mumps . . . wumps. And even as she was fighting her nausea she heard, with alarm, with horror, with consternation, her name. "Pom-e-gra-nate." And it was Chandrakant's voice. Chandrakant calling her. He could now reach her, she realised with dismay, halfway across the world.

"Help Pomegranate. Help." The lump which had been dough was now wet concrete. She covered her ears as well as her eyes. She knew that she could never, never fly that distance back to Chandrakant. She was too tired. She never again wanted to leave the sheltered night-black greenness of this tree.

"Pomegranate. Pomegranate." The call was becoming frantic. Hunched up and ruffled she wished she had a tortoiseshell in which to hide.

But something else was happening in her, a shuddering which she simply could not control and which started in the root of the missing feather. Pomegranate was nobody's fool. She had known from the first syllable of Chandrakant's call that she would have to go back, and now she realised that it was not only Chandrakant but a missing part of herself, her own feather in fact, which was calling her back. Cursing herself black and blue she perched resentfully on the end of a thin branch, staring into the darkness. Then with a squawk of despair she launched herself clumsily into the night.

Into the unknown, I was going to say, but on reflection she thought she knew pretty well what awaited her, and she was right.

He wanted to get rid of the lumps and had decided that he could do that only if he got rid of the feather. He was willing to say almost anything towards this end. But whether he told Pomegranate that he liked the new colour of her feathers, or that she was beautiful or intelligent or kind, she only flapped her wings or squawked, for his bumps grew alarmingly at each word and he himself only felt worse, much worse. It took him several days to get over each attempt.

One day Pomegranate could stand it even less than usual and said, "Come on Chandrakant. For better or worse, let's get this over. Let's go and find your royal kinsman."

Now Pomegranate was a great deal more frightened of the Royal Bengal Tiger than Chandrakant. She had heard more or less, rather more than less, what the Royal Pyjama'd Horse had heard. But she had no illusions

about what happened if you did not satisfy his conditions. If you did not, and quite often if you did, some said, he chewed you up. But there was nothing new for her in being in a double bind. It would just be something more extreme. So either Chandrakant's kinsman would, as he sometimes but rarely did, grant her wish and return her feather and lightness or otherwise . . . doomsday.

But Chandrakant, while he was quite confident about facing the Tiger under normal conditions, certainly wasn't going to be exposed to ridicule. The one thing he would not have was his kinsman laughing at him. But there was something in Pomegranate he had never seen before, something desperate, something that meant to have its way, so that as he looked into her tragic eye he panicked and said the first thing that came into his head. "Pomegranate, you should have your heart. If you stay here with me long enough I'm sure to find the thing to say. And we shouldn't be cowardly. What's a little suffering after all. Look at me. I've a hundred lumps to your one and I'm not complaining."

Chandrakant did in fact complain from morning to night, but just at the moment he had been surprised into saying something he had never thought about but which for a fleeting instant he really meant. Pomegranate drew her head in and looked at him out of haunted eyes. She searched as for something she had lost and would never find. She neither squawked nor flapped her wings. The thought of never recovering her lightness was like a wound that made her afraid to breathe. If Chandrakant's face had worn its usual completely idiotic expression, Pomegranate might have done anything rather than what she did. *She might have laughed. Instead, as she looked at Chandrakant's self-bewilderment (he looked as though he had smelt or eaten*

something completely novel), a few half-stifled gutturals escaped her great rounded beak. Then there was a long silence. Then she nodded and heard her voice saying, "That's true."

Through her tears she noticed that Chandrakant's face had become smooth again. It looked even more surprised than before: the feather was hanging down his nose and then it fell. It fell at his feet. And when he looked down he saw that it lay beside something diamond clear, white and twinkly . . . rather like a star. It had fallen from Pomegranate's eye. And it was so perfect that he was filled with wonder, though a small angry part in him persisted, anxious about himself, angry that she had got what she wanted first, for obviously he had just said the third kind thing. But what about *his* quest? Who was going to worry about that? And what about . . . but suddenly there was something else to worry about, for where the feather had been rooted in Chandrakant's forehead, there was now a deep hole, and into this came rushing something cold and clear. "Help. Pom . . ." But these sounds never left his lips, for at the same time as the something rushed in, his mind slipped quietly out through the same opening, and his eyes became riveted to the splash of transparent whiteness at his feet.

A shadow shifted over its surface and it grew into a picture of the whole of time and space spread out before him all at once, and he knew that so long as he kept his eyes fixed on the crystal he could see anything that he chose to see. So now he had to ask himself what he wanted to see most. Immediately a part of his mind managed to rush back through the opening in his head and he thought about something that had been at the back of it (his mind) for some time. He was conscious of all sorts of gaps in his education. Life with Fred

and the wild horses was no sort of preparation for a meeting with a Royal Kinsman. Perhaps he should try to see how such a meeting was conducted with all due protocol. But then as he stared into the diamond, the shadow shifted. It seemed to have been there all his life, the question that had been born with Fred's first kick, and returned and returned and returned when he failed to outgrow his pyjamas and then again with the lumpy animal, with the laughing animal, most humiliatingly with the beautiful white mare of his dreams and . . . most painfully, most searingly, so that it almost wrung tears from his heart even now, with those last words of the Treacherous Worm.

And then he knew. That was what he wanted: he wanted to see who he was.

Suddenly, as the sea-and-sky opened up into forever, he did see and he knew . . . who he had always been, forever and always. But what he saw, it is not possible to write here. Certainly he had no pyjamas. That much one can say. Though on the other hand, he was not naked, for there was nothing there to clothe. But about that too it is perhaps best not to speak. He wasn't even, or rather not even, only the dancing grace of the first little dawn horse. Perhaps one can safely say that he was full of the dawn and its grace but no less of the beauty of shadows on white water. He gazed at this thing for a long time. Then something moved and Chandrakant got answers to which he had asked no questions. Because he came to a time when he had been whatever there was in the whole wide world to be, all the forests and seas and skies. And now he saw it: himself and Pomegranate falling out of the everything, tumbling and tumbling down onto the deep floor of this deep forest, which is exactly where they both wanted to be and had to be.

He gave a deep sigh and looked up from the diamond at the magnificent white bird with rainbows in her feathers that was Pomegranate, and which he saw now had always been Pomegranate. And when she saw what he saw she cried two tears, two liquid tears this time, which can only come from a full and complete heart. And where the tears fell, soft green grass grew and formed a little magic circle which quickly spread and spread.

There was a terrible sound of cracking and breaking as the trees of the dark forest which had surrounded them snapped into pieces and blew away into nothingness. And in their place new trees sprang up and Pomegranate and Chandrakant found themselves in a sweet and fragrant, sacred grove.

Even as they gazed about their new surroundings, a flower-carpeted path appeared before them indicating the way; the way they both immediately understood led to the domain of the Royal Bengal Tiger. It was time to move on, yet Chandrakant, feeling a sort of naked spot on his forehead, still hesitated. When Pomegranate understood she said, "But Chandrakant, you don't need it now."

"Yes, I know," said Chandrakant somewhat ashamed, "but still it feels somewhat bare up here", he squinted up at his brow, "without the . . ."

"I see", said Pomegranate and then, "I don't think we'd be able to get the feather in again, but I'll tell you what . . ." And she flew from her flowered branch and perched on his brow.

"How does that feel?"

"Just right", said Chandrakant much relieved because he had been afraid that now that Pomegranate had her heart she might fly away, a prospect which seemed far less attractive than it had, only an eternity ago.

"I can always slip off", said Pomegranate,

"just before we get there." And that was how they journeyed all the way.

They met many strange and even some rather savage animals on their way --fish too, for they had still to cross an ocean--but they were never attacked, because when you have a complete heart and wear it on your brow you are quite safe everywhere.

Finally they came to the Tiger's country. And very wild and jungly country it was too, but by then such things bothered them not at all, and they politely asked of the first animal they met the way to His Majesty the Royal Bengal Tiger.

The loyal subjects of the Tiger were used to seeing all sorts of creatures coming to pay homage to their king, but they had never seen anything quite like this: the prancing Royal Pyjama'd Horse and the beautiful rainbow bird sitting serenely on his head.

They were directed to the dwelling of the king.

At the gate, Chandrakant, for the first time since they'd left the forest, got a little flustered, and when he was asked his name he said "Royal Pyjama'd Horse" quite forgetting to say anything about Pomegranate. His name was taken inside.

They waited and waited and at last an attendant came, a great white horse who looked at Chandrakant very curiously and at Pomegranate even more curiously and said, "You really wish to see the Master?"

"Yes, Yes", said Chandrakant. "We have travelled so far to see him."

"Yes, many creatures do. Please, your reasons for wanting to see him?"

"Reasons?" Chandrakant squinted up at Pomegranate who was still better with words than he was, though she spoke much less these days. But she said nothing. "It is necessary to have reasons?"

"Absolutely necessary. You see we have to know what you want, preparations must be made accordingly. Those who wish to be absorbed, for example . . ."

"Absorbed?"

"Yes, absorbed. Assimilated." There was a small flutter of wings and Pomegranate said, "Eek." But Chandrakant still did not understand.

"What does he mean?" he asked, squinting up.

"He wants to know if you want to get eaten."

"Travel all this way to get eaten?" Chandrakant was incredulous. "Have a heart", said Chandrakant not intending to pun.

"Only if you wish to offer yourself. But even if you offer yourself the Master may not accept. He only accepts offerings of the greatest purity."

"Well, that's good."

"Creatures who have not been properly purified upset his digestion." Chandrakant considered this and decided with relief that he would probably give the Tiger colic.

"Look here, my good horse," said Pomegranate with some sharpness, "is there no other way of meeting your Master than as his tiffin?" Meetings at the gate with the Master's attendants often brought out the worst in people.

"Yes", said the attendant. "You can meet him in the arena. Most of those who come here arrive exhausted and can think of nothing more appealing than to be a good meal and get some rest; but there are those who prefer to stay in the arena." Chandrakant squinted up impatiently to get an explanation of this word, but Pomegranate only said something else which he did not understand.

"I think he's talking symbolically."

"Listen . . ." he said impatiently.

"He just means those who want to live instead of getting swallowed."

"Oh yes, yes, we'll meet him in the arena", said Chandrakant.

The horse-attendant put his head to one side and said, "But even then, as I am bound by my Master to explain, very few come out whole."

"What?"

"Yes. Only the very very few – only those who *know* come out unscathed."

"And what happens to the others?"

"Well, out of those too, some get absorbed, but most of them . . . the Master is obliged to chew them up and spit them out. Then they have to go all the way through another round and another until either they *know* or decide they want to be absorbed." But Chandrakant was already turning his head in an attempt to hide his smile. Because *he knew*. Mukund had told him: what pleases the Tiger most is when you're not afraid. He even had to paw the ground a little to stop himself from giggling aloud because the attendant thought he didn't know and all the time he had the secret. He tried to wink up at Pomegranate but she was staring at the attendant and her wing feathers, well, they were ruffled and so were those on her head. She looked a little like she used to after battling a head wind. And Chandrakant thought that really she should have groomed herself for the occasion.

"And those who know and aren't absorbed, my good horse?" he said pleasantly to the attendant, for he was very delighted with everything and the attendant's answer delighted him even more.

"Those few? They are free, of course. They can do anything. Usually they go out to conquer the world."

"Conquer the world?" Chandrakant nearly let out a whoop like the wild horse cry. Every-

thing was falling right into place. "Yes, that's for me", he said. "Take me to your Master, my good horse. Tell him his kinsman the Royal Pyjama'd Horse is here and is very anxious to meet him in the arena." The attendant gave a small sort of smile. He came in touch with so many lunatics that only on his very good days did he allow himself to be amused.

"Well, there's an arena session in ten minutes so we can accommodate you. Sign here." Chandrakant scratched R.P'd.H. as Pomegranate had taught him to do. He had never been able to write his full name but she had said that it didn't matter. In the old days none of the world conquerors had known how to write.

After that everything went very quickly. They were hurried through the showers with all the bath attendants muttering about "last minute entries" and "creatures who have no sense of time" and then they were anointed with clove oil by a little sulky sloth bear who could hardly reach up to Pomegranate's forehead and kept on saying, "Ha! double trouble. Ha! double trouble."

And then they were led down a dark corridor which they knew must lead into the arena. And there in the dark Pomegranate started wanting to exercise her wretched heart: "Chandrakant. It's been such a lovely voyage. I really have loved every moment of it. You remember the first kindness, Chandrakant?"

"Yes Pomegranate. Not now." He really wasn't in the mood.

"You remember how we used to bicker?" said Pomegranate smiling nostalgically. "The things we used to think were important . . . it seems stupid now, doesn't it?"

"Yes, very stupid." He was beginning to paw the ground.

"Chandrakant, I hope if we get spat out we'll be together for the next round and the next and the next."

"Don't speak like that Pomegranate. It brings bad luck. It's conquering the world and being free I'm thinking of. You see, I know."

Just then a magnificent black panther rippled up and said, "All right, in ten seconds I'm going to open the door into the arena. So think your best thoughts. One, two, three. Hullo, there's something wrong. Who's R.P.'d.H?"

"I am."

"And who's this bird?"

"I'm Pomegranate."

"Well, I haven't got your name so you can't go in."

"We're together", said Pomegranate. And she started screeching and getting her feathers all awry and doing her old hysterical stuff. Chandrakant felt sorry for her, but still. What a moment to choose . . ."

The panther flowed forward, bounded lightly up and plucked her free from Chandrakant's head in one paw, whispering "I think not", and while she squawked and fluttered the panther opened the door.

"Go!" he said. Chandrakant hesitated. He tried to think of something to say to Pomegranate.

"It's all right Pom . . ."

"Go!" He felt a kick of iron in exactly Fred's kicking place and he skidded out into sunshine on all four legs. He looked around in a daze until his eyes came to rest on a statue. Behind the statue a gold and black striped tail was moving slowly from side to side. Then the eyes of the reclining statue opened, and for a moment he thought that he had never seen such a silent harmless creature in his life, and then for a fraction of a second Chandrakant looked into those eyes. All his muscles began twitching wildly. His knees collapsed. "Bend the knee. Bend the knee. I'll kill you or bend the knee", his disturbed brain started sending

wild messages. But once you've collapsed in the arena, of course it's too late to bend the knee or do anything else for that matter, at least until the next time around. The moment has passed and that's it.

And Chandrakant knew it. One always does have just long enough to know what went wrong and make decisions about the next round. Chandrakant lay there sprawled out and quivering while his whole life flashed panoramically before him as they say it does, and the Master gathered to pounce. He was already in midair when Chandrakant felt something land with a bump on his head, and through a great blur he saw the Tiger stop in midair and his jaws click closed in astonishment. He came down softly on all fours a few feet from Chandrakant.

Now there are two things that delight the Tiger, though Mukund had known only one of them. It pleases him when creatures are not afraid of him and it pleases him even more when they surprise him, and Pomegranate had just surprised him. Moreover, when he looked up at her he found her staring right back at him with her unalterably parrotty stare (there are some things that never change much) and he could see immediately that she was not afraid. So he was doubly pleased and delighted and he looked at her and smiled. And Chandrakant, who had miraculously stopped trembling the moment Pomegranate rejoined him saw that the Master was looking at them . . . with Love. And now he looked into the eyes a second time and this time he knew. He KNEW. And of course he was not afraid.

The Tiger smiled some more and nodded and then took a few paces back so that they could get untangled from his gaze. Then he sank down somnolently again and shook his head from side to side in the Indian gesture that means "all right".



He smiled.

He blinked. He switched his tail. You could see he was still pleased from his surprise. "All right then," he said, "go and conquer the world." He called the black panther, who appeared silently before him.

"Lucitan," he said, "let these two out the back way. They needn't be called back again. They're going to conquer. They can stay . . .

oh, as long as they like, as long as it takes. No more rounds."

"May I check?" asked Lucitan.

The Master smiled apologetically as if to say, "What to do?", and nodded at the panther.

The panther rippled forward and tried to pluck the parrot from Chandrakant's head.

But he couldn't.

ELECTROSTATIC FIELDS AND BRAIN/BODY/ENVIRONMENT INTERRELATIONSHIPS

James B. Beal

*We have to remember that what we observe is not nature
itself but nature exposed to our method of questioning.*

Werner Heisenberg

Let us suppose for a moment that we are back in the year 1600, concerned with forecasting probable future trends. In retrospect it is clear that one of the most significant events in progress was what came later to be called the Copernican revolution. Would our futurist researches have picked this up? They might have, if we were looking for the right things. What was the essence of this remarkable transformation that started with the brash suggestions of Nicholas Copernicus and Giordano Bruno and led to consequences as diverse as a tremendous acceleration in physical science and a decline in the political power of the Church? One useful interpretation is that a group of questions relating to the position of the Earth in the universe, and the nature and significance of the heavenly bodies passed out of the realm of the theological and philosophical and into the realm of empirical inquiry. No longer were these questions to be settled by referring to this or that ecclesiastical or scholarly authority; rather they were to be subjected to illumination by systematic observation and experiments. The consequences of such a shift are manifold. New research activities are started; familiar phenomena are given new interpretations; educational approaches are altered; power struc-

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tures in society undergo change; new bases for consensus are applied to conflicts between belief systems.

A later similar event occurred with the work of the geologists, paleontologists, and biologists of the nineteenth century culminating in the controversial evolutionary hypotheses. Questions relating to the origin of the earth and of man were relabeled "empirical" instead of "theological". Again the consequences reverberated throughout the worlds of research, education, and politics.

I believe there is good reason to suspect that we are in the midst of another such saltation today. Much evidence suggests that a group of questions relating to the commonality of and interpretation of man's subjective experience, especially of the "transcendental", and hence to the bases of human values, are shifting from the realm of the "philosophical" to the "empirical". If so, the consequences may be even more far-reaching than those which emerged from the Copernican, Darwinian, and Freudian revolutions.¹

Historically, paradigm clashes have been characterized by bitter emotional antagonisms, and total rejection of the opponent. Currently we are seeing the same sort of process: the respectable psychiatrist, who would not take any of those "psychotomimetic" drugs himself or sit down and experience that crazy meditation process, carries out research to show that drug takers and those who practice meditation are escapists. The drug taker or meditator views the same investigator as narrow-minded, prejudiced, and repressive, and as a result drops out of the university. Communication between the two factions is almost nil. Can science deal adequately with the experiences of these people and those who claim psychic experiences?

Because science has been incredibly successful in dealing with the physical world, it has been historically associated with a philosophy of physicalism, the belief that reality is all reducible to certain kinds of physical entities. The vast majority of phenomena of altered states of consciousness (ASC) have no known physical manifestations; thus to physicalistic philosophy they are epiphenomena, not worthy of study. But insofar as science deals with knowledge, it need not restrict itself only to physical kinds of knowledge.

Most of what we know about the phenomena of ASCs has been obtained from untrained people, almost none of whom have shared the scientists' commitment to constantly reexamine their observations in greater and greater detail.

Throughout history man has been influenced by the spiritual and mystical factors that are expressed (usually in watered-down form) in the religions that attract the masses of people. Spiritual and mystical experiences are primary phenomena of various ASCs: because

1. Willis W. Harman, *The New Copernican Revolution*.

of such experiences, untold numbers of both the noblest and most horrible acts of which people are capable have been committed. Yet in all the time that Western science has existed, no concerted attempt has been made to understand these ASC phenomena in scientific terms.

It was the hope of many that religions were simply a form of superstition that would be left behind in our "rational" age. Not only has this hope failed, but our own understanding of the nature of reasoning now makes it clear that it can never be fulfilled. Reason is a tool, and a tool that is wielded in the service of assumptions, beliefs, and needs which are not themselves subject to reason. The irrational, or, better yet, the arational, will not disappear from the human situation. Our immense success in the development of the physical sciences has not been particularly successful in formulating better philosophies of life, or increasing our real knowledge of ourselves. The sciences we have developed to date are not very human sciences. They tell us how to do things, but give us no scientific insights on questions what to do, what not to do, or why to do things.²

Where do we go from here? Well, let's take a look at some areas in the past which may shed light on the present, and then touch on recent information about biological effects, mental and physical, of electromagnetic fields, electrostatic fields, and ions. Then we can perform a bit of "constraint removal analysis" to proceed from the known to the unknown by building some testable models.

It began in remote times. The tribal shaman *felt* the place was holy. He did not understand the place was situated in the center of a dipole— a node in the earth's magnetic fields. He did not understand that under the ground the circuits of subterranean streams has formed a pattern generating changes in the earth's local magnetic field, and associated improvements in positive (+) electrostatic (ES) field strength and negative (—) ion concentration, or that waterfalls, crashing ocean breakers, mountain locations with electrical storms and pine trees had additional beneficial electrical effects.

He did not know these things—he could not know them, but he sensed them, in the excited electrochemical processes in his own nervous system, and that these in turn triggered the neurons and synapses in the circuits of his brain. He sensed that a divine intuition, a revelation was upon him and that the gods were speaking to him—directly. And so the ancient holy places and spas were built and many were oriented north and south . . . which brings us to the story of the compass.

One of the few early references to the compass that remain is in the Ku Chin Chu, a Chinese dictionary of the fourth century. The pertinent entry reads:

Hsia-ma tzu, the tadpole, is also called "the mysterious needle" (hsuan

2. Charles T. Tart, "States of Consciousness and State-Specific Sciences", *Science* 176 (June 16, 1972): 1203.

chen), or the "mysterious fish" (hsuan yu), and another name for it is the "spoon-shaped beastie" (kho tou). Its shape is round and it has a long tail.

The spoon was carved from a lodestone or filled with pieces of lodestone to make it into a bar magnet oriented along its length, and the handle always swung toward south (or yang). They could just as easily have made it a north-seeking compass as ours are today, but why point toward everything dark, evil, and female?

The compass was used to guide travelers almost from the beginning. Of course a registered magician did all the interpreting, since for centuries the "spoon-shaped beastie" was probably as closely guarded a secret as the atom bomb. The Western world knew nothing of its existence for more than a thousand years. Perhaps rumors were heard, but they must have been dismissed as black Eastern magic. The first appearance of a south-pointer in Europe was late in the twelfth century, and then it spread widely, particularly among the Mediterranean seafaring nations. Incidentally, Christopher Columbus is credited with being the first to realize that the magnetic compass did not point exactly north and south.

With all our sophisticated knowledge of magnetic materials today our understanding of the earth's magnetism is still spotty—note the surprise occasioned by the discovery of the Van Allen Belts—and in some respects ancient wisdom may still exceed our own. The Chinese very early understood that it was some sort of current in and of the earth which made their south-pointer move so strangely. They reasoned that if it is natural for the lodestone to align itself with this current, much as a moored boat aligns itself with the water of a stream, how much more important is it for the human being and his home and garden to be aligned with the cosmic current. Thus we have the creation of geomancy, "the art of adapting the residences of the living and the tombs of the dead so as to cooperate and harmonize with the local currents of the cosmic breath". This explains the extraordinary loveliness and balance of old Chinese landscaping and architectural placement. Today investigators are wondering whether we, too, had better take up geomancy, since there is some evidence that human happiness does depend on harmony with the earth's magnetic field. City planners please note.³

There is, so far as I can see, only one ultimate test of Reality vs. Illusion. The measure of the reality of a concept is the measure of its utility. "What can you *do* with it?" in other words.

Psychic phenomena (I prefer "unexplained phenomena") has manifested effects associated with gravity, time and the electromagnetic spectrum. It seems uniquely associated with life processes of complex nature—a dynamic process involving a hierarchy of biosystems—at

3. "Interesting to Note", *Product Engineering* (April 1, 1963).

we do not understand the single cell very well yet. What happens when you put billions of cells together to form brain and body and then expose to another dynamic variable, the environment? Several magnitudes of complexity beyond our technology exist, so unexplained phenomena can be expected. Maybe we've been trying to analyze the desert by looking at individual grains of sand!

The mind, as a product of brain, body and environmental stimuli, may be the highest form of synergistic pattern now known to exist. The phenomenon of consciousness (and learning processes) needs more objective study; however, this may prove a tough objective, since the consciousness has only itself to study itself with! It may be worthwhile to start with simpler systems and work our way up. Perhaps the emerging use of "biosensors", such as plants, tissue cultures, and single cell organisms will give us the necessary amplification and selectivity for specific quantitative data of value about ASCs and psychic phenomena.

The earth's natural field is normally positive, ranging from electrostatic values of a few hundred volts per meter (v/m) to many thousands of v/m, depending on altitude, humidity, temperature, and geographical location. Inside metal-frame buildings, automobiles, airplanes or any structure surrounded by metal the earth ES field is zero; a natural Faraday Cage is produced. Indeed, the extensive use of plastics (almost all have a high negative ES field) inside of buildings and vehicles can provide a strong negative field which augments fatigue, irritability, and natural apathy (the blahs). This statement leads to an intriguing question: Are we also electrically polluting our environment? This seems a distinct possibility. Have you noticed how your new plastic-containing clothing sticks to your body in cold, dry weather? The body field is positive and the plastic is negative, thus creating this uncomfortable effect.

The earth's ES field keeps the natural negatively charged oxygen ions on the move, producing beneficial physiological effects in living organisms and to which man has, over the millions of years, adapted himself. Incidentally, an interesting earth field effect perceived by animals is the "earthquake alarm". Earthquakes often produce significant electromagnetic "signature" patterns which propagate at the speed of light. The animals sense a sudden change in the usually stable, slowly changing environmental background low-frequency and ES fields. This is unusual, so the animal is alerted and seeks a place of safety (same reaction to the radiated energy of hurricanes and tornadoes). "Earthquake lightning", skyglow and ionospheric disturbances sometimes precede earthquakes because of the enormous amounts of stored up energy in crystalline rock (piezoelectric effect).

The electrical field is the force of motion and the ions are the carriers of electrical charge. Many tests have been performed which indicate that (---) ions (oxygen molecules with surplus electrons looks for electro-chemical processes to enhance) produced improved performance, disposition, equilibrium, burn recovery and healing, and relieved pain and allergic disorders; (+) ions of CO₂ decreased performance and depressed dispositions or had no effect. Indeed, effects are often more apparent in living systems which are not healthy! Baron von Reichen-

bach, a nineteenth century German scientist, discovered around 1850 that ill psychic individuals were hypersensitive to magnetic fields. Not only did they suffer various aches and pains when a strong bar magnet was nearby, but it is documented that they could see the pole fields plainly, in color, around the magnet in a totally dark room. It is not known why, but a person under hypnosis or in a state of mescaline intoxication can often perceive a static magnetic field—through modification of visual images. A flicker effect is associated with a varying field.

Dr. Puharich and others have noted the improved results for biological radio communication (telepathy) experiments when the receiver subject was exposed to a (—) ion environment and (+) ES field inside a Faraday Cage. Dr. Sulman of Hebrew University in Israel evaluated my equipment (2500 volts d.c. on a plate one meter from top of head) and found that the ES field had a tendency to lower brain wave frequency. As another item of interest, Familial Periodic Disease, a type of flaccid periodic paralysis (with preponderant 4 to 6 Hz brain waves), produces evidence of psychic ability in a large number of cases. Treatment with Dilantin (diphenylhydantoin) and potassium is often effective (wonder if psychic ability was "cured" with the disease!). Recent brainwave experiments indicate that ES fields can influence the rate of spontaneous electrical impulse generation by the nerves (wonder what it does to the acupuncture point electrical characteristics? . . . will have to investigate). Other recent tests have demonstrated that brightness discrimination and alertness improve and the visual critical flicker frequency is affected by (+) ES fields.

As a tie-in here, it should be noted that the earth's (+) ES potential gradient usually reaches a maximum during full moon to third quarter: the metabolic processes of life increase, as does oxygen consumption. Traditionally, crops are planted at this time for optimum germination. In addition, it is wise to avoid surgery at this time to prevent problems with bleeding (reduction of viscosity index of blood and lymph fluid).

The magnetic field of the earth averages about 0.5 Gauss and has continuous pulsations of low magnitude at frequencies ranging from 0.1 to 100 Hz, *peaking at around 10 Hz*; this is known as the Schumann resonance where the earth-ionosphere cavity acts as a natural resonator; this was believed much more powerful during primitive earth development and may have played an important part in the origin and evolution of life. The typical 7-14 Hz alpha brainwave pattern for sleep and dreaming falls precisely in this range, and a relationship between these phenomena has been suggested by many investigators. This is the area known as biological entrainment of the human brain by low frequency radiation. Note that similar frequencies of light and sound pulses can trigger epileptic attacks, induce ASCs and cause nausea. The step from external sensory stimuli to subconscious EM stimuli in entraining cerebral rhythms is not a radical concept. For example, approaching storm fronts appear to have a local electrostatic/electromagnetic/infrasonic variation of 3-5 Hz; the ion balance of the atmosphere and the ES field polarity are also affected by the storm front. In addition to reaction time reductions, headaches, general depression and lethargy occur in weather-

sensitive individuals. Paranormal abilities and events decrease. Accident rates of automobiles and aircraft may also be associated with these effects (especially when warm fronts and solar activity coincide and the operator of the vehicle is already tired or in a stressed state).

The possibilities of bioentrainment (for enhancement, training, or suppression of psychic ability) are already with us when one considers that medical equipment for treatment of nerve deafness is now available for inducing sound into the cochlea electrically (electrical stimulation of hearing first reported by Volta in 1800!). Although those in the vicinity hear nothing, the subject near the antenna perceives sound as if through earphones. The ability of many individuals to "hear" radar microwave as a "buzzing like bees", is well documented, as are sporadic reports of "hearing" aurora displays and meteors passing over. As one might expect, these reports have until recently been dismissed as unfounded . . . after all, the effects were subjective and not everyone heard them. Nurses who work in mental institutions describe patients who are always trying to get away from "the terrible noise". Certain rooms or areas seem to be more quiet for them (electrical field null points?). How many people are now in mental institutions or psychologically afflicted because of hypersensitivity to electric fields? Russian investigators report that changes in hypothalamus activity can increase the sensitivity to EM fields many times.

A magnet at 60 Hz and 8700 Gauss held to the temple gives rise to a visual light sensation known as the "phosphene" effect. This effect can also be induced by electrical frequencies, chemical means, fasting, meditation or fatigue techniques. Patterns (visual archetypes), such as spirals and geometric shapes, are often observed which are strikingly similar to the pictographs left by ancient man in all parts of the world. It appears there may be some potential clues here for electronic stimulation of vision to aid the blind.

The availability of electric field meters (or electrostatic scanners, which can monitor living system bioelectric fields as well as the local environment) should lead to some interesting applications for brain/body/environment research in the near future. This equipment can serve as a type of biofeedback device to view in real time the dynamic ES field potentials around the living system and the way these potentials change patterns during disease and mental states. The ES field around the body may be an analogue of what is known as "aura" . . . at least the ability to observe brain/body/environment interactions would be improved. Some interesting work is also underway at present to observe the ultraviolet field around the body using low light level image vidicon television camera tubes of high sensitivity equipped with ultraviolet transmission filters replacing the tube glass front. Sophisticated electronic color enhancement can then be used to provide a color readout of changes in applied field (modulation of imposed high frequency, high voltage electrical energy which produces a large amount of ultraviolet around the body) or natural field (best results obtained with those persons able to concentrate "Ki" energy!).

Now, let's indulge in some more "constraint removal analysis" in so-called meta-

physical areas. How about the controversial phenomena known as "firewalking"? Those of you who have read about this phenomena know that some form of ritual is generally required before an individual goes stomping out across the red-hot coals and through the fire. An altered state of consciousness is required: individuals often literally whip themselves into a frenzy. Can this be for real? Maybe so. Lets consider Electrostatic Cooling. An ES field created by properly placed high-voltage (10-20kV) probes can cause a red-hot metal object *within the field* to cool perceptably. One theory for the sudden high rate of heat transfer is that the resulting ion flow causes surface turbulence. Another speculation is that since energy is required to extract electrons from the heated material, there should be cooling when the thermions are emitted (electric wind effect). If true, the removal of electrons then causes the observed cooling. Whatever the explanation, the demonstrations are impressive. The ES cooling process is being investigated for applications to re-entry space craft cooling and . . . firefighting!

In some of the psychokinetic (PK) experiments with Alla Vinogradova in Moscow, where she moves various objects about on a dielectric surface, there is a great deal of ES energy around the object, enough to easily light a small neon glow tube. Measurements with ES field meters indicate potentials of at least 10 to 12 kV/meter, which also indicate field pulsations synchronized with the respiration rate, heart, and brain rhythms. Interesting to contemplate, however, is the fact that in the region between Alla and the object there are no large fields and frequencies present . . . the energy increases in intensity as one approaches the object. Thus, this may be truly action at a distance, but not via our familiar kind of space-time laws which would indicate that there should be energy manifestations detectable all the way from the operator to the object! Besides the fact that we seem to be dealing with a very different kind of energy, neither electromagnetic nor sonic, this energy seems to function in a frame of reference of nature which is not the one we're used to considering. Anyway, if what the Russians claim is true (and it will be easy enough to check out), then it may be possible to build up on the body surface, and project as required, a high potential ES field (among other things). This will require an altered state of consciousness, hypnosis, or autogenic training, assisted with the ES field scanner equipment as biofeedback indicator. The ES cooling process may not provide us with the exact explanation for the phenomena of fire walking, but its the closest yet! PK phenomena often is accompanied by a cooling effect; Crookes reports this in his investigations of D. Home in the nineteenth century. Thermal effects were recently reported from Stanford researchers in experiments with psychic Ingo Swann and infrared camera evaluations of the hands of healer's shows a cooling effect present in the vicinity of the hand during healing sessions. If it is possible to raise the body ES field strength locally then the *healing* effects of this type of biofeedback training should be investigated. Studies now underway indicate that electrostatic and electromagnetic (pulsed) fields aid in the healing process.

It seems obvious we should be studying how to evaluate and enhance psychic abilities in a controlled geophysical environment, complementing the internal body environment by the

proper ties with the nerve network, blood chemistry, glandular chemistry, and body time. As mentioned herein, possibilities seem to exist for effects on brainwave frequency and bioentrainment of brainwave rhythms with light, sound, and EM fields; visual phosphene effects and sound can also be induced electrically. It will be necessary to monitor and record a large number of variables to determine the patterns unique to a particular psychic event. This will require a programmable minicomputer to monitor as many as thirty variables of mind, body and environment in real time. Then a green light can be flashed when an event occurs, the computer can look for the proper pattern and after enough statistical information has accumulated as to the most likely combination of factors, then these factors can be made more constant and optimum teaching occurs . . . sort of a super-feedback machine.

As equipment is developed, the range of spacial and temporal variations of electrical and magnetic fields generated by humans and our technology, animals, plants, and the geophysical environment, must be established.

Mechanisms by which such fields are generated and influenced must receive much more study.

As more data are gathered in fundamental studies involving the areas mentioned herein, the "how" and "why" of field effects, known and unknown, should emerge. We will have to apply more systems engineering, electronics of complex nature, and computers than ever before in seeking the proper dynamic patterns.⁴

It seems at present that there are too many specialists in some areas but not enough persons skilled in interdisciplinary areas involving physics, electrical engineering, biology, behavior, and general systems. There is a need for "interpreters" or application teams of individuals who can interface as "generalists" between disciplines. This would be a means by which a scientist or student in one discipline could obtain information in another discipline—and understand it.

There is a lot of qualitative data, going back to the beginning of history, about psychic phenomena effects on living processes, people, domestic animals, plants, and inanimate objects, but little background data in terms of astrophysical, geophysical, psychological and physiological conditions required to develop the effects. Such evidence as exists in arcane and ancient literature is clouded by dogma, ritual, theology, semantics, and secrecy. However,

4. James B. Beal, "Field Effects, Known and Unknown, Associated with Living Systems". IEEE Intercon 74 presentation, March 26-29, 1974, New York, feature session: "New Advances in Parapsychology". *Note:* This paper contains additional detail and extensive references to technical documents, domestic and foreign, to support the general statements made in this brief paper. If you wish to investigate this area further, send for a copy of the above paper (illustrated) and enclose a check for \$2 to cover printing, mailing and handling costs. Send your request to: James B. Beal, 3741 S.W. 124th Court, Miami, Florida 33165 U.S.A.

empirical evidence does exist that a number of ancient cultures knew about the vectorial relationship existing between the EM field direction and the neuroaxis, and that the geomagnetic field appeared to affect the functioning of higher neuronal centers. The EM field orientation in tests of living systems is often overlooked in our present culture, but was considered most important by other cultures, as mentioned earlier. Thus, reappraisal of the historical and ancient literature in myths, legends, religious systems, and philosophies, where applicable in the field of psychic phenomena, is warranted.

The *total human being* must be considered. We can't just sum up the inputs and say this is all there is to this or that person. It's how the inputs are combined that counts, and how the combinations act in symbiosis with the environment. Consciousness itself appears to be a kind of synergistic hierarchal physical process devolving from the nature of the brain (holographic information storage?). It will not be understood by studying the individual sensing systems, conscious and unconscious, i.e., putting each body input in its own "little black box" and specializing in a narrow range of view. The general systems approach is necessary.

The bioelectric field effects, described herein, are not to be construed as the cause behind unexplained and psychic phenomena. They may only serve, at best, as weak indicators, precursors, or stimulators in regard to effects filtering down from a higher system. And the large amounts of external, internal and emotional "noise" often drown out the feeble signals getting out or going in.

The potentialities of the individual human being are far greater, in extent and diversity, than we ordinarily imagine them to be, and far greater than currently *negative* in-vogue models of man would lead us to think possible. We are finally beginning to discover some of these potentialities through the newly emerging Science of Subjective Experience (Noetics) which involves monitoring of unconscious processes, through biofeedback, and increasing our awareness of external and internal effects on our mind and body, so we can become optimum persons; thus, understanding ourselves and others better. The broadest possible overview of our effects on our environment, environmental feedback, and the mental and physical result is needed for realization of our potential as a total human being.

REVIEWS

Toward Final Personality Integration, by *A. Reza Arasteh*. Cambridge, Massachusetts: Schenkman Publishing Co., 1975. Second edition, 291 pages, \$12.50.

"Several visionary experiences and a few psychological experiments almost two decades ago convinced me of the significance of final integration in the adult personality." So begins the introduction to this study. It is the author's belief that modern psychology is unnecessarily preoccupied with childhood complexes, incipient neuroses, etc. Reversing the Freudian dictum, "in every adult there is a child who is responsible for his behavior", he affirms, "within every child there is also a mature adult who is becoming". It is the object of Dr. Arasteh's "psycho-cultural analysis" to aid the unfoldment of this adult's integral personality. There are similarities between his system and certain Eastern spiritual disciplines, especially the Sufi. A synthesis of traditional wisdom and psychological methodology is attempted which, while it falls short, never lapses into mere eclecticism. The author's approach could do much to get orthodox psychoanalysis out of its rut.

The exceeding of culture is fundamental to the author's system. Culture is a formation. Within it the individual finds the security of a ready-made identity. But the "autonomous being" is unable to rest content with this solution, which produces, as cultural forms develop, "a fragmented man within a well-organised society". This man feels, in the opinion of the author, deep anxiety. He is driven to find true identity. If he is Near-Eastern by birth, he may resort to the art of rebirth (Sufism); if oriental, to one of the "ways of liberation" (e.g., yoga or Zen Buddhism). A Westerner will more likely be attracted to a scientific method, for example, psychoanalysis. The author believes "these three approaches are similar if not identical". This conclusion is ill-based, in my opinion. While it is true that the search for truth is universal, the Western methods—groping, superficial, overconfident—cannot be equated with time-tested Eastern disciplines. The author, however, is aware of the limitations of the different systems of Western psychology. His own psycho-cultural analysis is his answer to the problem. But although he believes he has "outlined man's formidable task", I feel that, while he has given some helpful indications, he has missed the essence of the matter.

Dr. Arasteh's system is at once too vital and too mental. He accepts the Freudian lower vital drives, i.e., sex and preservation, but adds to this infrarational framework only a higher vital urge to activity. The vitalism inherent in this view is accentuated by his altering of the famous Cartesian formula to read: "I live, therefore I am." But are life and existence syn-

onymous? There are suprarational soul-drives which are underrated by the author—and the soul is not the same as the vital being, the life-personality. Nor can mind be discounted if we mean to arrive at an integral view of personality. In the author's system the mind's search for truth is regarded as an outgrowth of the urge to activity. But although intrinsic value is thus denied to man's rational interests, the mental predominates in the structure of Dr. Arasteh's book. The charts and "mathematical functions" of personality are a sure sign of this. So also is the replacement of a self-knowing by "self-decipherment". It is only the intellect that looks on existence as a puzzle.

It is also the mind that is driven by "anxious search". While it is true that many seekers after integral personality feel an acute sense of dissatisfaction with the ordinary cultural state, this troubled condition cannot be the basis of a lasting transcultural endeavour. Indeed, in yoga, although the value of a state of uneasiness, called *vyakulata*, is recognised by certain systems, such as Vaishnava *bhakti*, the foundation of true seeking is equality, contentment and peace. Anxiety may be there at the outset, but if the effort is to be fruitful it must be transformed into an intense, calm psychic aspiration.

Thus it is again the soul, what the author's two heroes, Rumi and Goethe, refer to as the heart, that is lacking in this psychological system. Goethe says, "denouncing intellect as a means to giving certainty":

~
Intellect is cruel,
The heart is better.

And Rumi, the great thirteenth century Sufi, after searching the holy places of different religions and the works of Avicenna, declares:

I gazed into my heart,
There I saw Him; He was nowhere else.

The soul-values inherent in the author's system have to be infused into its outer structure

Section three, comprising psycho-cultural analyses of Rumi, Goethe and a modern Turkish youth, is undoubtedly the most interesting in the book. Rumi's development—his career, dissatisfaction, search and final attainment of integration after a long, difficult *sadhana*—is traced, mostly by means of quotations from his mystic writings. This Eastern case study is balanced by an examination of the personality of Goethe, a Western "universal man", who has been considered a "Sufi unfulfilled" by K. D. Sethna. It is refreshing to be able to read about genius without stumbling at every step over Oedipus complexes, sibling rivalries and the like. Dr. Arasteh has held up this pseudo-scientific nonsense for the ridicule it so well deserves. His approach is more enlightened and more helpful. It grants more dignity and offers more hope to man. It is not a psychological system to be accepted *in toto*, but it is a step in the right direction.

The book is well written throughout. The author's prose, concise, but amply elaborated, is engaging and convincing. Indeed the effectivity of the style at times hides flaws in the

underlying foundation. The summary of the views of Fromm is a model of epitomisation and clarity. While in certain specialised fields (classical philology, for example), minor errors mar the total effect, the psychological data which form the book's basic substance are presented with authority and ease.

Peter Heehs

Reviews, poems, a verse drama, and articles by Peter Heehs have appeared in several ashram-related journals since his arrival in 1971, and a collection of his poems, Night and Dawn, was published in 1975. Mr. Heehs does research and editorial work for the Sri Aurobindo Ashram Archives and Research Library.

Life: The Unfinished Experiment, by S. E. Luria. Souvenir Press, 1976. 165 pages, £3.50.

S. E. Luria is director of the Center for Cancer Research at the Massachusetts Institute of Technology, Cambridge, and in 1969 he shared the Nobel Prize in physiology. So he is well qualified to describe the fundamental processes of nature, the replication mechanisms and the operation of genes.

However, if the title leads us to presume an Experimenter, this book does not go that far. This is rather strange and the contradiction carries right through the book to the end.

The explanation of how genes work is excellent and lucid, but when the writer leaves biochemistry the thinking seems to falter. For example, we are constantly met by statements such as the following:

The ultimate form of a protein is reached through the mutual attraction or repulsion of its chemical groups. It is as if the clay on a sculptor's bench shaped itself spontaneously into a work of art. [P. 88]

A domain where artistic and geometric skills combine in the use of proteins as building materials is in the fashioning of viruses. [P. 91]

Referring to the cell, the writer says:

It is unmistakably a piece of machinery perfected to do a superior job of the business of living. . . . [P. 115]

He adds:

If the peripheral nervous network is in the main genetically determined, the central network within the brain certainly is. [P. 143]

And concludes:

Humankind is justified, I believe, in suspecting that once again blind evolution has operated with subtle wisdom. [P. 150]

Now this seems to me to be a blatant contradicton in terms—that something that is blind could also operate with subtle wisdom.

Surely, the point of view expressed by Sir Alister Hardy in his book *The Biology of God* (Jonathan Cape, 1975; chapter entitled, "Towards a New Natural Theology") is more rational. He says:

I believe the Divine spirit--the spirit of life--the *entheos*--the *élan vital*, call it what you will--brought about the organic evolution through the action of Darwinian selection.

This "Divine spirit" seems to be engaged in perfecting a work of art and expresses itself through countless millions of brains all programmed from the cradle to the grave, embodying a symbiotic union between God and the Devil in a further necessary reduction to genuine monotheism.

To protect ourselves and subjectively *feel* free, we must cooperate with each other in obedience to the prime Law of Nature for survival.

S. E. Luria has gone part of the way in showing this but, surely, we need to face these further vital implications of the evidence that, in this book, he has only half acknowledged

Desmond Tarrant

Desmond Tarrant has taught English and American literature in a number of colleges and universities in Britain and America. He is a writer and critic who contributes regularly to scholarly and scientific journals. Author of a study of the American essayist and novelist, James Branch Cabell, he is an advisory editor of The Cabellian.

FOCUS

AUGUST MEETINGS

If those who believe in the oneness of humanity stood together and let their united light shine, this in itself would expose the causes of disunity and stagnation. . . . Social change has become so rapid that there is a continual demand for new methods.

Karl Heussenstamm

Executive Committee

The executive committee will meet at Parc Guest House, Pondicherry, at 2:30 P.M. on Saturday, 14 August 1976. Every World Union Centre with more than ten members is invited to send one representative and those with more than twenty-five members, two representatives to participate in the meeting.

A meeting of the executive committee should be an occasion for creative and constructive thought in the progress and development of the World Union movement. There is always the danger of a meeting slipping into routine procedures with routine thought and work, forgetting the high ideals which World Union is meant to realise. We hope and trust this next meeting will not be gone through only as a formal affair and that every member will be moved to express fresh and practical ideas and suggestions which will intensify the movement of World Union.

The meeting will first be called upon to think how best we can enlarge the circle of members and inspire formation of new, active centres which will draw the awareness of people to the work of unity and attract participation in this great and essential task. It is also necessary to have World Union coordinators in various regions who will make tours to initiate new centres and foster developments in existing ones.

Second, the meeting should determine that the attention of colleges and universities will be drawn to the high quality of the journal, *World Union*, and to its usefulness for the promotion of world unity and world consciousness, so that its circulation among the intelligentsia increases. Each World Union centre can play a helpful role in this connection by approaching educational institutions in its area.

Third, the Third World Council of World Union will be formed for a term of six years, beginning 1 September 1976. We are often asked how the council is constituted and what its functions are. Local, regional and national centres recommend names for nomination to the council. The executive committee determines the precise representation of each regional,

national or local centre according to each one's membership strength and capacity of contribution to the work of World Union. The members of the executive committee are ipso facto members of the council. Moreover, some distinguished persons are nominated as members whose prior consent is obtained. Every member of the executive committee is free to suggest a name providing the nominee's consent has already been taken. The life of each sitting of the council is six years, as noted above, and it meets every third year. The World Council is the general authority for direction and management of the work of World Union. Specifically, it elects a new executive committee every third year. Any member of World Union may send his views in writing concerning any item on the agenda of a World Council meeting. All such views will receive due attention in the proceedings of the meeting.

Fourth, the executive committee will consider the progress report of the fifth triennial World Union International conference, which promises to be a unique event: a number of internationally eminent people will attend the seminar, and the subject, *The Next Future*, is expected to engage spiritual and new age leaders, scholars, artists, industrialists, labour leaders, and serious students from a great many angles.

Central Council of World Union India Centre

The central council of World Union India Centre will be convened at Bangalore on 17 August 1976. Members will soon receive the agenda circular. Two subjects will need serious attention: how to be effective in the work of national integration; how to raise the finance required to sustain the work efficiently. In both of these matters the members of the central council will have to proceed with firm confidence and faith, and remember always that no good work goes in vain and no great cause executed earnestly and sincerely suffers for want of necessary finance.

WORLD CONSTITUENT ASSEMBLY

The "Focus" of October 1975 featured the World Constitution and Parliament Association's plans to convene a World Constituent Assembly at Innsbruck, Austria, during the last two weeks of June 1977. Some members of World Union have shown interest in the assembly and have expressed a desire to be included in the World Union delegation which may attend. In this connection, Mr. Philip Isely, the secretary general of the association, has sent samples of two forms for those who would like to attend the assembly: a declaration and registration form, and an election petition form. These forms may be obtained at the address given toward the end of this report.

The instructions the association has given for applicants include:

- (i) Register as a candidate for election to the World Constituent Assembly, using the form supplied by the World Constitution and Parliament Association. All persons desiring to serve as accredited delegates must register in this way.
- (ii) Circulate election petitions, using the form supplied by the World Constitution and Parliament Association, to obtain a minimum constituency of 500 individual electors. Each

candidate is responsible for printing and circulating his or her own election petitions.

Or: Those who were accredited as elected delegates to the first sessions of the World Constitutional Convention and Peoples World Parliament in 1968, will be accredited to the 1977 World Constituent Assembly provided they register as candidates for election to the 1977 World Constituent Assembly as defined above. Also, those receiving 500 or more votes in elections to the Peoples Congress and who register as candidates for election to the World Constituent Assembly will be accredited as delegates to the World Constituent Assembly.

Or: Obtain a minimum of 500 electoral votes in any public election in which your support of the World Constituent Assembly and your candidacy for election to the World Constituent Assembly is made part of your electoral campaign, and submit proof thereof.

(iii) Endeavour to collect a contribution from each person who signs your election petitions, for the purpose of paying for your transportation and living expenses for two weeks while attending the World Constituent Assembly. If you collect more than you need for your own expenses, the surplus can be put into the general fund of the World Constitution and Parliament Association to assist others and to help to carry on the total campaign, both now and later.

(iv) Don't wait. Begin your campaign for election as soon as possible, together with the collection of funds to pay for your expenses.

(v) Study the draft of "A Constitution for the Federation of Earth", which is the result of many years work by the drafting commission which originated at the first sessions of the World Constitutional Convention and Peoples World Parliament in 1968, together with inputs of comments from many others during the time this draft has been circulating for discussion.

(vi) Study all other matters relating to the objectives and agenda of the 1977 World Constituent Assembly and the subsequent World Parliament.

(vii) Individuals whose participation in the World Constituent Assembly is desired but who do not secure the credentials necessary to serve as elected delegates, may be seated as consultants by vote of the accredited delegates or as provided by the rules of procedure for the World Constituent Assembly.

Support to the Constituent Assembly

A portion of the text, "Call to a World Constituent Assembly", was published in "Focus" of October 1975, along with other information about the assembly. Some of our centres have already joined in signing the call to the 1977 assembly and have thus shown recognition of the common citizenship of all men. In this regard Mr. Isely writes: "We do appreciate very much your collaboration in this common cause for action to save humanity. Perhaps at your meeting in August you can further push the endeavour. Is it possible that the Call could be published in *World Union* with a portion of a page for persons to sign and cut out and send here?

"From India we should expect a very good delegation to the World Constituent Assembly, particularly if the financial problem of transportation can be solved."

We give below the form in which such support can be sent by anyone who wishes, to: Mr. Philip Isely, Secretary General, World Constitution and Parliament Association, 1480 Hoyt Street, Suite 31, Lakewood, Colorado 80215, U.S.A.

Recognising our common citizenship of One Earth, the dangers of war, and the needs of humanity, we join in signing this Call to the 1977 World Constituent Assembly.

Signature.Occupation.Date.
Print Name.Please send me. . .Copies of the Call Donation. . . .
Address.City.State.Zip.
Country.

While sending this form duly filled in you are encouraged to also obtain signatures of your friends in similar form, and post all these forms to Mr. Isely. We are happy to report that Mr. Isely recognises the process that persons residing in India must undergo to clear the sending of foreign exchange abroad, and he has waived the remittance of a donation or registration fee regarding all forms mailed from India.

ORGANISATIONAL ACTIVITY

World Union Centres

Bangalore Nearly the entire meeting of 6 June was given to discussion of Sri Rohit Mehta's draft paper on education entitled, "An Educational Policy and Programme" (see "Focus", April 1976, for the complete text), which he had presented to the executive committee in February. The following reactions of the Bangalore Centre are among those requested of all members and centres in order to work toward a consensus and final decision in this matter.

After a lengthy, active and frank discussion, which included present and former professors (one in political science, one in engineering), a former teacher trained in various localities of the UNESCO operation, and a medical doctor, the following conclusions were reached: (1) World Union should not undertake an educational policy and programme because: it is too complex an endeavour, beyond the capacity—financial, personnel, organisational—of World Union; the draft paper does not take into cognizance the prevalent conditions of rural society, where the different living standards and context require a very different approach; the draft's proposals are reported to have been tried in essence in the U.S.A. and England where educators are alleged to have recently rejected them; there is no point in adding one more paper to the many educational reform documents already in government files; and (2) World Union "should work only as a pressure group, endeavouring to introduce into the existing educational system principles and methods that will promote world consciousness, world outlook, and world unity amongst the educators and the educated".

Other responses to the draft paper are expected to be discussed along with these in the approaching executive committee meeting, August 14th.

Calcutta Their June meeting of the 18th was the occasion to hear a visiting secretary from Sri Aurobindo's Action, Sri Kumar Mukherji. He went into some detail relating the progress one makes in yoga or spiritual development with the ascension of human unity into material reality. The implication that individual development is only truly integral when it expands into social and, eventually, universal development, was made explicitly clear.

In this meeting the intended relief society (referred to in the July "Focus") was brought nearer to its actualisation. Sri Arun Kishore Mukherji was entrusted with the position of convener-secretary in order to set up the "Sri Aurobindo Relief Society" under the World Union Cultural and Economic Council. Its purpose is, of course, to render relief services to those without means.

Hyderabad New officers elected at the meeting of 24 June are: Dr. P. N. Bindu, chairman; Dr. Nadkarni, vice-chairman; and Mr. Kashinath, secretary.

North Calcutta Among the flourishing of many activities during their meeting on 21 June, two major issues were considered in the period of discussion. One was the suggestible sequence of four movements proposed in the seminar of The Next Future, World Union International's fifth triennial conference. The movements are service and perfection in work, harmony and order, power and effectuation, and knowledge and the development of consciousness. Sri T. K. Sinha's comment was that the results of these movements in the conference might contribute valuable ideas to others about spiritually oriented communities. A second major issue was a challenge thrown out to members to contemplate how national integration can be achieved, and how hindrances to it may be removed.

The Training Centre of Children and Students has grown into a regular "weekly circle" since beginning on 31 May 1976. Its next Monday evening meeting will study "Human Aspiration". Sri Samar Basu, giving a number of talks on Sri Aurobindo's contribution to various fields, concluded the series that evening with a discussion of Sri Aurobindo's contribution to yoga, education, economics, arts and literature. Children and students recited prayers, read their own articles, and conducted, among themselves, a symposium they had developed based on their own research.

Pondicherry June 27, 1976 marked the day of revival of the Pondicherry Centre, for it was the first meeting of members convened in about three years. Mentioning this fact, Sri A. B. Patel, general secretary of the International Centre, said the centre had virtually ceased to function. The meeting elected a new group of officers after hearing Professor Sarawan of the French College, Dr. Madhava Menon, principal of the Government Law College, and A. B. Patel give considerable emphasis to the need for World Union to be active, vigilant and to take up practical projects in Pondicherry in the spirit of the teaching of Sri Aurobindo and the Mother. The new officers are: Mr. George Moses, chairman; Mrs. Kusumben S. Mehta, vice-chairman; Sri Arvind Devalia, convener; Sri N. V. Narasimhamurthy, member of the committee. Authorisation was given to the committee to co-opt other members.

Uttarpara The 138th birthday of Rishi Bankimchandra was observed by the women and youth wings of the centre in an unusual symposium, the theme of which was prepared from writings of Sri Aurobindo which were published in the *Induprakesh* journal after Bankim passed away. The participants were all students, and many professors and teachers composed part of the audience.

July 3rd marked the centre's thirty-fifth monthly study meeting. This time Sri Samar Basu, in a talk entitled "Sri Aurobindo on Future Society", described the entire process of development in man's social psychology. He began with the symbolic stage of pre-history and early history and moved through the typical and conventional stages to the present rational

or individualistic age. Then he went into the future, elucidating how this age of reason would dry out (a phenomenon already happening in some countries or societies) and the rising waters of the subjective age would turn us toward the spiritual age and society. Sri Basu spent some time on what the character of spiritual society would be. Those who are familiar with *The Human Cycle* of Sri Aurobindo will recognise the basis of Sri Basu's presentation, which was heard by distinguished Uttarpara intellectuals, including professors and headmasters.

New Life Members

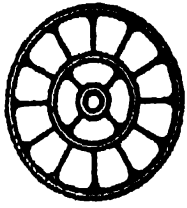
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General Secretary
15 July 1976



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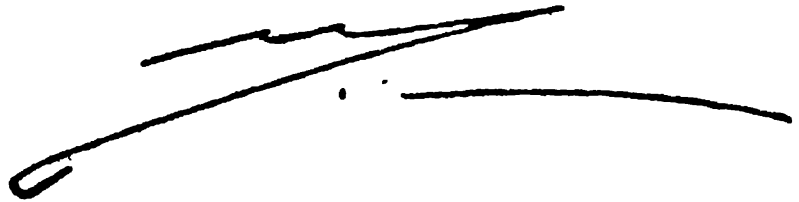
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—Sri Aurobindo



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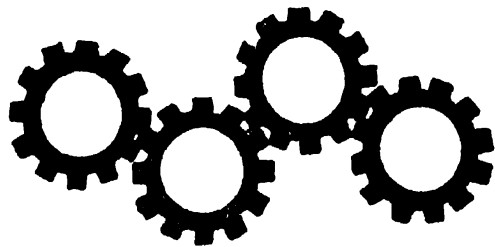
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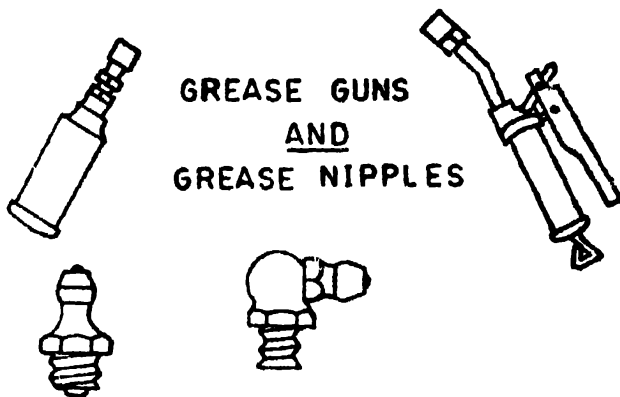
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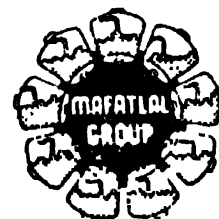
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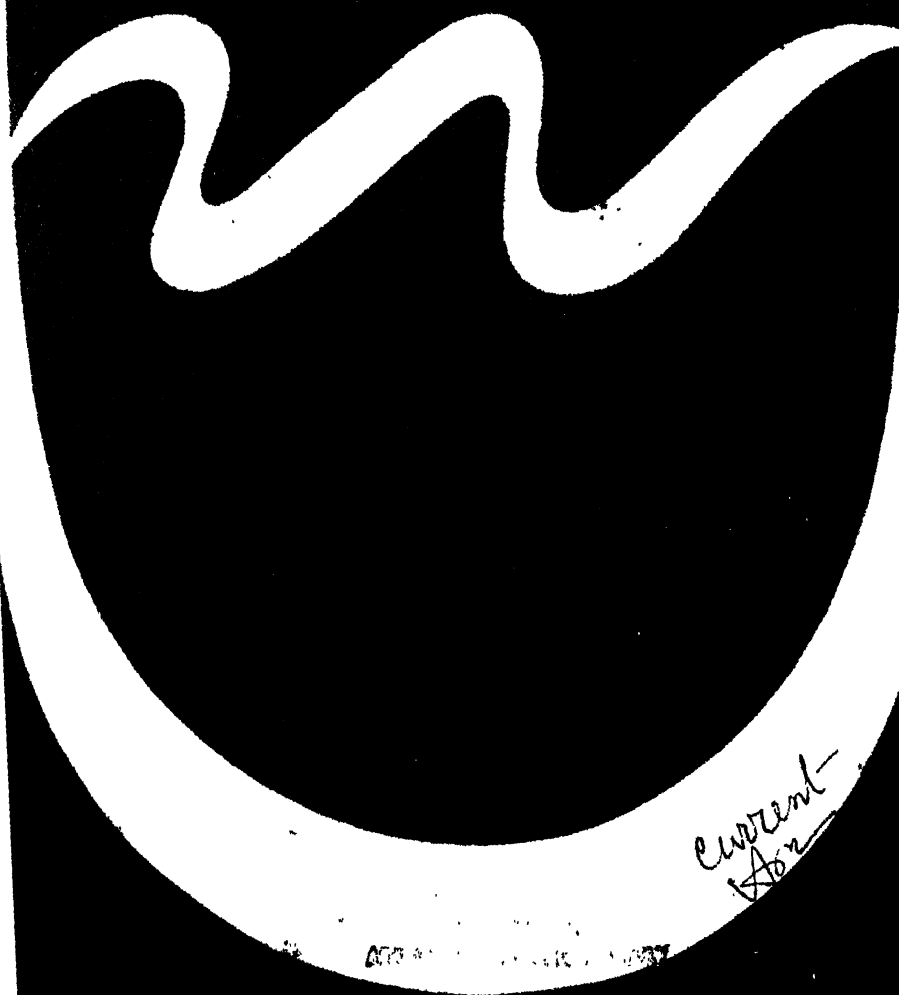
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EDITORIAL

Communities—Open or Closed?

The institution of religious and spiritual communities is a well-founded one. Christian monasteries, Buddhist *viharas*, and in our times the various semi-spiritual and idealistic communities in different parts of the world have certain similar features. Individuals gather together attracted by common ideals and seek to develop a collective existence dedicated to realising them in their lives. Some of these societies are open to all who share their goals and believe in their way of living. Others are more or less isolated in order to ensure an unadulterated effort at realising their aims.

Basic questions are now being raised concerning communities which limit their interaction with the world at large. Can collectivities of this type be or offer any answer to the problems that face humankind? If it be said that they are working out possible solutions on a laboratory basis, the next question is: How long are they to remain laboratories? And, too, it may be fairly asked: Can human problems be worked out in conditions far removed from and dissimilar to the day to day conditions of humanity? And what is the effect on the individuals who constitute the laboratories? Do they not tend to settle into ever-repeating patterns, a rut? Like an individual, would not the being of the society also ossify if it restricts itself too long to the same, safe "environment"?

These are some of the queries I had to face in this connection during a recent trip to Singapore. How can such communities—undoubtedly founded with the most laudable intentions—fulfil the role expected of them? At what stage and at what points should they contact or join the main life-stream? How can they be prevented from stultifying, sheltered as they are from the challenges of life? If a community is intended merely as a retreat, one can understand isolation. But if it is intended to be a pioneer of new ways of living—religious or cultural or spiritual—these questions call for objective study and solution.

The Olympics and Fellowship

One can only feel sad at the way the injection of political considerations was allowed to vitiate the spirit and conduct of the recent Olympics in Montreal.

There was even talk of organising a separate "third world" Olympics under the overseership of a sympathetic major power. The very purpose of holding such meets is of course defeated if these extraneous factors are turned into issues for debate in gatherings meant for promoting international fellowship and goodwill.

In his book, *Greek Medicine in Asia*, Major General Bhatia mentions an incident of unusual fellowship during the First World War when the Allied and the Turkish armies were locked in deadly combat. After one battle in which both sides sustained especially heavy casualties and Major Bhatia had just finished attending to his wounded, the British officer in command approached him, observed that the Turks also must have suffered heavily, and asked the Major if he would go to treat their men also. Reading this, one could not but be moved, but one also wonders if such a thing could happen in these times of complete, "uncompromising" warfare.

M. P. P.

SKINNER AND HEIDEGGER

Richard Matz

Burrhus Frederic Skinner is a radical representative of the kind of thinking that Heidegger calls *rechnendes Denken*, calculating thought. This movement, which has ruled Western science and philosophy at least since Bacon, Galilei, and Descartes, has made numbers and quantities the key elements of reality instead of gods, spirits and angels. Here I am going to match, dialectically, this mode of thinking against what Heidegger calls *besinnliches Nachdenken*, consideration. The aim of this thinking is not specified measuring and control, but concordance, or confluence, of man's practice with the weal of "things", with the weal of everything. Man as the shepherd of Being, instead of man as the exploiter of beings, of objects.

Freedom Questioned

The title of Skinner's recent book is a bold one indeed: *Beyond Freedom and Dignity*. Since freedom and dignity are cardinal professed values in our present civilisation, anyone who attacks or questions them is liable to be attacked and called reactionary.

Like most of Skinner's books, his latest

Richard Matz is a Swedish author and exponent of the philosophy of Martin Heidegger. He has written books, and articles for various periodicals; his last contribution to World Union appeared in February 1975.

one conveys but little substantial knowledge, but it is crammed with agitating arguments against "autonomous man" and other remnants of what he calls prescientific thinking. Besides, *Beyond Freedom and Dignity* is little more than an abridged rehash of an earlier book, *Science and Human Behavior*. Skinner bluntly denies the very possibility and dimension of intentionality, of *Besinnung*.

The last stronghold of autonomous man in empiricist psychology was the extra-scientific "black box", the unknowable shunting system inserted between stimulus and response. Skinner no more needs the black box. For him there is no missing link between stimulus and response. Individual characteristics, feelings, aims, opinions, preferences, and similar concepts are but atavistic survivals of prescientific thinking, mere figments like the gods of Olympus. According to Skinner all facts relevant for human behavior are to be found in contingencies, in environment. The resultant of contingencies is behavior, scientifically measurable behavior.

Freedom in this world is at best a vague illusion, at worst an element of anarchic destruction, a disintegrating ambition to do what one likes. So Skinner is fiercely anti-liberal, considering himself, I suppose, to be some kind of technocratic socialist.

Skinner, like Heidegger or Laing and most of us, is anxious about the future of mankind, about the dangers of pollution and so forth.

This wide-range feedback in Skinner himself is not very well in accordance with behaviorism, which prefers specified stimuli, and has some difficulty in presenting itself as a respectable and responsible system for a new culture. In *Walden Two* Skinner dreams of a technocratic paradise, where man at long last has learned to mind himself and his world, and keeps his practice, scientifically, within the limits of long-range possibilities. Once people hand over the responsibility for their behavior to the scientific control of contingencies, their cultural creativeness will sprout as never before, Skinner assures us.

Freedom Re-formulated

Both Skinner and Heidegger criticise the liberal concept of liberty, though their conclusions as to what is to be done are opposite. Both launch fierce attacks on the conception of man as something separate and independent from the rest of creation. Both attack humanism, anthropocentrism. Heidegger insists on the dethronement of man as the measure of everything, and pleads for *Gelassenheit zu den Dingen*, emancipated and tender composure in our relation to things, even to technical everyday things; we should neither hate the gimmicks around us, nor let ourselves be hypnotized by them; they obviously cannot help the fact that man has distorted the Earth this way; compare Thornton Wilder.

The fullest possibility of man, according to Heidegger, is to consider things as holy, as manifestations of whole-ness, of *objets trouvés* in art. When Heidegger takes an example of a thing, he tells us about a sacrificial vessel, whereas Skinner stresses the fact that the world of man grows more and more manmade, and he finds this reassuring. Skinner considers this consistent and continued technification of man and his world

to be the only possible salvation for mankind. Heidegger, on the other hand, finds Western man's indomitable efforts to change the Earth, and to increase production, an extremely ominous development. He calls this way of living and working *das Gestell*.

There is, of course, an important difference between Heidegger's and Skinner's concepts of liberty, of freedom. Skinner considers freedom an illusion, since man is entirely dependent on contingencies, whereas Heidegger tries to launch a deeper concept as freedom.

There is, of course, something fundamentally asocial and anarchic in Mill's definition of liberty as the possibility to do what you like. For what do we like (provided it does not infringe upon the liberty of others) and why?

However, the liberal definition of liberty is the most common in our days; we find hints at it in terms like leisure and holidays. Then we are *free from* our jobs, which mostly, alas, are not very much in agreement with what we really want or like, what we can wholly accept and do not need to be compensated for. Wages are a kind of damages.

So in ordinary modern life, man is hovering between two extremes of irrelevancy, namely his job, where he is alienated, and his leisure time, where he is living just for himself and his conventional pleasure. Religion should mend this split irrelevancy, but it is a sad fact that the Church does little more than add still another irrelevancy to the other two. Indeed, the Christian religion has not proved capable to forge a good practice in the Western world.

There is one word that is seldom, or never, found in Skinner's writings; that word is consideration, reconsideration; the German, *Besinnung*. Now, for Heidegger, freedom is not found on the level of doing what we individualistically and egoistically want or like, but on the level where our individual aspira-

tions, by dint of consideration, *besinnliches Denken*, maturity, realizes essential truth as concordance between the individual life resultant and the weal of the totality of things, of living beings, of Being. When we, to some extent, have reached this level, we *want* what is good for the totality, and we act in concordance with it without being conditioned by behavioristic contraptions or technologies. Then we are positively *free for* something essential, not negatively—liberalistically—*free from* something we try to get rid of. Freedom of this kind is in opposition to society only if society is not in concordance with the resultant of *besinnliches Denken*. Indeed society nowadays is possessed by *rechnendes Denken*. In the present situation, where few activities are oriented toward the weal of totality, the highest social bliss, that is to say concordance between mature man and the resultant of society, is almost always impossible. The forces of maturity, of intentionality, nowadays work for fundamental change in man's relation to nature, to Earth. That is the direction of freedom not from the state, but freedom in confluence with a long-term good social resultant.

So both Skinner and Heidegger attack individualistic, liberalistic freedom, but whereas Skinner tries to get rid altogether of freedom and intentionality as mere irrelevance, Heidegger tries to reformulate the very concept of freedom as a cofunction of essential truth, and to lift it out of the individualistic and anthropocentric sphere, into an open and loving (*gelassen*) attitude toward—or confluence with—men and things in general, with the majesty of Being in them, and in us.

Humanism and Anthropocracy

We could say that Western anthropocentrism, or anthropocracy, has developed along

two different, but interrelated lines: humanism and science. In positivist, preferably natural, science, man and Being are not treated as totalities; reality—beings—is partitioned into sectors or preserves of measurableness, and man, as scientist, is idealized as an utterly objective and neutral observer compiling and systematizing knowledge, data, ultimately for the sake of controlling and exploiting nature, reality.

Humanism centers round man as something separate, something "transcending" nature; it does not mind if technology and science exploit nature, provided all this is done for the weal—or at least the material welfare—of mankind, the culmination of mankind being the smug humanist in his university institution, measuring cultural objects, or in his comfortable home full of books, paintings and records, munching cultural values.

C. P. Snow has little more than amusing remarks on the fatal chasm in our civilization between humanism and science. Heidegger neither recommends a choice between the two, nor does he try to formulate some kind of compromise. For him this partition is a symptom of double-sided *Seins-vergessenheit*, forgottenness of Being, alienation from essentialities. The remedy for this state is not some paltry compromise or rapprochement, or some rallying round human values, but pan-sacramental identification of man with the weal of Being, the weal of things, both science and humanism being fundamentally nonloving in their attitude toward nonhuman reality, what we call nature. Still, as a natural scientist, as a humanist or as a practical worker in everyday life, man can live in contact with the level of *Besinnung* and *Gelassenheit*, and so help Being, the sculptural essentialities, to trickle into a world possessed by madness of production and research.

Our Western way of living, *das Gestell*, rules the entire globe, but it lacks intentional integration, both between humanism and natural science, and between them both and the rest of nature. This practice is not real, conscious, practice at all, but rather dizzy somnambulism, social cancer. The only remedy for this cancer is *Besinnung*, the key-word of the nonexclusive humanism we need, the chromosome that need take command in the present state of chaotic growth and recklessness.

The Ecological Proletariat

Of course Skinner hates humanism as a stronghold of autonomous man. Lately Claude Lévi-Strauss has warned against it too. Lévi-Strauss stresses that we shall never overcome racism unless we overcome the technocratic exploitation and suppression of what we may call "the ecological proletariat", that is to say animals and plants. He might have added the so-called dead things. He recommends Western civilization learn from Buddhism, which does not, like Christianity, preach a matter-of-fact attitude toward the world, but solidarity with all living beings, *ahimsa*, nonkilling. Heidegger too castigates humanism for trying to guide the world with the aid of "values"; values can be regarded as paltry, sophisticated substitutes for spirits, gods, and angels.

Marx's thinking on the alienation of industrial man from his work, from his very work-piece, was the clue for a fundamental rethinking of man's relation to the rest of nature. Unfortunately Marx never had time to carry on this line, with the result that socialism, ever since, has had an industrial, quantitative and anthropocentric bias. Much of the present Marxist debate is characterized by a narrow and barren type of intellectualism (Althusser) which is hermetically isolated both from wis-

dom and wider considerations (Heidegger) and from the masses, and hard to distinguish from positivism.

An important part of Sartre's writings has aimed at "brushing up" Marxism from its intellectual stagnation. In certain East European countries, especially Yugoslavia but also Czechoslovakia and Hungary, philosophers are trying to complete and follow up Marxist thinking on central themes like alienation and praxis, especially with the aid of Heidegger's thinking. The periodical *Praxis*, Zagreb, Yugoslavia, which in 1974 was stopped by the government, was for some years the leading European publication for thinking along the lines of Heidegger.

Of course there is a long distance between the present *Praxis* debate and a fundamental questioning of industrialism and of the technocratic attitude of which Skinner is a radical representative. Anyhow Marxist debate has begun playing in a new and essential key, and is rapidly approaching the dialectic—pro or contra industrialism—that is sprouting in the consciousness of people; remember the battle of the elms in Stockholm in May 1971. The dialectic between industrial man and the rest of nature, "the ecological proletariat", is dawning. This is the beginning of the end of narrow-minded, exploiting Western anthropocracy.

Science and Jubilation

Skinner's view on science is radically positivist. However, he, like Karl Popper, is passionate in a way that most typical positivists are not, since they are afraid of losing their cognitive elevation.

For Skinner physics, and biology, are the ideal sciences. Like Buckle, he believes in "cultural lag"; whereas natural sciences have advanced to a marvelous level, humanities re-

main much the same as in the times of Socrates and Plato. Skinner makes fun of Aristotle who believed that a stone feels jubilant when it falls to the ground. According to Skinner, natural sciences were not able to develop until they had emancipated themselves from such childish personification and anthropomorphism, and had come to look upon things in an entirely objective and neutral way. Skinner could have mentioned Christianity as a mighty source of this scientistic secularisation, but he did not, presumably because religion is a sector completely apart from behavioral science.

Natural sciences have developed, humanities have not. What was wrong with physics in the days of Aristotle must evidently be wrong with humanities today. The solution, Skinner tells us, is to *discard anthropomorphism in relation to man too*, to depersonalize man just as science, earlier, has depersonalized plants and stones. Man, so to speak, feels no more jubilant than a falling stone. All we can observe and state in a respectable way with mating couples or jubilant crowds are certain measurable items of verbal or sexual behavior.

Instrumentalism

Science, Skinner tells us, has no effect whatsoever on reality until it is put into practice. So science would be a stimulus without response, which is something remarkable indeed. The theory must be, and it is indeed a widespread creed among scientists, that the expert provides the decision-maker with reliable knowledge about his specialty, but that nothing whatever happens until the decision-maker has uttered his "*Fiat!*", his "Let there be!" Autonomous man is not quite dead after all. He seems to be fully alive in the decision-making topside of the establishment . . .

Skinner advises us not to mind what the "controllers" tell us as acts of autonomy, but rather as results of the contingencies which have been working on them.

The instrumentalist concept of science is very common, e.g., in intellectualistic neo-marxist circles. Skjervheim is caught in it. Scientific knowledge, the instrumentalists tell us, is like a knife or an axe; it is not good or bad in itself; all depends on how it is used.

For the instrumentalist a car is not good or bad in itself, all depends on what you transport and where, and possibly on who are poisoned by exhaust or massacred in accidents. A thermonuclear bomb is neither good nor bad in itself, all depends on what is annihilated. Perhaps even a man is not good or bad in himself; all then depends on how the deciding establishment (or the contingencies) chooses to use him.

The instrumentalist scientistic ideology makes it possible for the scientists to work on any project, the ultimate goal of science being the quantitative growth of knowledge, any knowledge. Then it is for the politicians, the managers and the generals to decide. In autumn 1945 some atomic experts claimed President Truman had made an improper use of their splendid bomb; they themselves had no guilt.

Heidegger does *not* consider "pure" science nonconsequential and mere instrumental. The prerequisite of pure science is a quasi-neutral, in reality hostile and loveless, attitude towards the investigated objects, which are considered as mere complexes of measurableness (*das Ding an sich*). Science, like any other innovation, such as spurs, electricity or railways, has a mighty structural, largely unconscious and unheeded, influence, beside its shortsighted instrumental function inside the prevailing system. See especially

Harold Innis's extremely comprehensive studies on communication.

The data and theories of science are spread through millions of books and articles round the globe. They are, indeed, an extremely important input (stimulus) for mankind, and they produce consequences (responses), perhaps to a larger extent than anything else, especially in our age where the faculty for comprehensive consideration, *Besinnung*, is atrophied and does not function as a strainer in the black box, and strict specialization is the order of the day.

Sciences as Sectors or as Parabolas

For Skinner as for positivists in general, each science has a well-defined field of its own. This is a residue from the old craft-guilds. University does not mean universalness or something, but guild (Swedish: *skra*). For Skinner the relations between, for instance, psychology and biology are no more problematic than the neighbourhood relation between a barber's shop and a tailor's shop.

Every science should control its own field; according to Skinner the scientists know best. Now science too, he tells us, is a mode of behavior. And who should control scientific behavior if not the specialists on the technology of behavior, the behaviorists themselves? Skinner does not seem to realize that he himself, just like all other behavers, is also biological, chemical, social and so forth, and that the biologist, for instance, may be quite as eager to control the behaviorist as the behaviorist to control him; the boundaries between their territories may be difficult to trace. But presumably both, in our splendid scientific future, will be controlled anonymously by the laboratorylike contingencies that will condition all of us.

Instead of considering sciences and other

specialties as separate squares or sectors, we had better look upon them as parabolas, stretching from the lower specialized reaches of the dome of total human practice, with apexes gravitating round one single focus, the top of the dome being the common territory of all specialties. This culmination is the crossing point of the full-grown human all-minding, *Besinnung*. The specialized lower levels of the sciences/parabolas can thus look quite apart from one another, or even antagonistic and irreconcilable, but nothing can fulfill its own essence as something entirely separated, but only as subordinated to, and contributing to, the hovering top, the common weal of all, not only of man. No specialty is too "advanced" to mind it and care for it. The sciences' claim for independence is an ominous symptom of arrogant immaturity. There is no escape, not even for sciences, from the ethical dimension.

Contingencies and Technical Power

Unfortunately the technology of behavior, in its sector, suffers tremendously from cultural lag, and has not yet got its Newton. But in the future, Skinner assures us, technical aids will be available. We have already anti-riot drugs, etc. As you may know, there are at present experiments being performed of putting small radio-receivers into the brains of animals so as to control their behavior through electrical impulses. Of course these innovations are not meant for cows or horses, but for man. Presumably discipline in schools and gaols will be less problematic in the future . . .

Skinner does not falter even here. Even if each individual will have such a technocratic embassy in his head, man will still be there just like before, and more creative than ever, Skinner assures us. The only difference will

be that the control of behavior (that anyway is total) will become somewhat more adequate and sophisticated. For Skinner such "inputs" obviously constitute but a minor change in the situation of man.

For the present, however, the controller will have to put up with other contingencies than electric control of the central nervous system. Anyhow: To control contingencies is to control man, and control, indeed, is necessary if catastrophes are to be avoided. *Besinnung*, for Skinner, does not count.

To control man via contingencies must be the job of behavioral technology. But contingencies—everything that influences man's behavior—is indeed the whole world. To grant adequate behavior, behavioral science must be given the control of virtually everything, including of course the other sciences.

The Depravation of Western Religion

However, we had better not take Skinner's plans for total control of man as mere evil *Wille zur Macht*, will for power. He earnestly believes scientifically manipulated man will be a wonder of cultural creativeness. And he is earnestly—though somewhat non-behavioristically—anxious about the future of the Earth. And he is, in his way, not afraid of putting questions, fundamental questions. Of course he is not a deep thinker like Heidegger or Lévi-Strauss, but he earnestly believes in exact science as a means of creating global human coherence, a good practice inside the long-range possibilities of the Earth.

In earlier days, and especially in so-called primitive tribes, there were ceremonies and rites which integrated man in society. This process of socialization need not at all be oppressive, provided the activities of society are in concordance with the highest maturing

possibilities of man. This is a struggle for making essentials socially valid, a struggle where nothing is granted once for all, where everything is liable to sink down into *Säins-vergessenheit*, into disintegration, if the fundamental issues are not kept fresh.

Rites and myths are not for fun but for the integration of the anthroposphere. It is only here, in our splendid Western civilization, that religion has degenerated into mere irrelevancies, centering round conventional fuss at weddings and funerals. Religion became something by itself, an isolated sector or faculty, whereas the world was to be managed in a matter-of-fact way; secularization is an entirely Christian process; a prerequisite of the tremendous boom of Western empirical knowledge and production.

Skinner, accordingly, treats religion as an activity going on, undialectically, alongside of economics, politics, art, etc.

The separation of religion from the world is an old process, which took form especially in the thinking of St. Augustine, but whose roots go back to Jewish traditions and to Plato. Religion means, etymologically, "caring for", and should be the opposite of negligence. Religion, thus, is the integrating element in the world of man. Only in Western philosophical tradition the integrating element itself has been degraded to an isolated sector (religion, theology), whereas the world, stripped of its integrating element, dissolved into specialties and sciences. This chasm between theology and "philosophy" was the paramount problem of scholasticism, and the development in modern times has made this chasm still wider and largely invisible. So, real integrated thought is rare in the West; lately, however, the exceptions seem to have become more numerous and more heeded; Heidegger and Laing, and the interest in East Asian

thought, are examples of this trend, which is lashed forward under the impact of global dangers; the essentialities are beginning to dawn after a long and heavy night. It is an open question whether the rising light will be strong enough to make our world take a better course, out of its present blindfoldedness. That is the crucial constellation of today.

Language and Reductionism

Skinner tries to solve the problem of coordination by making technology a substitute for religion. The most important traditional medium for this coordination, however, is language. It is symptomatic that Skinner does all he can to reduce language to "muscular activities which produce noises". For him there is no essential difference between words and sneezes or burps. Meaning itself cannot be measured in a respectable way, whereas sounds and movements can. It is a pity that Skinner himself is forced to explain the meaninglessness of language in meaningful language. The better he pleads his cause the worse for it.

The humanistic attack on behaviorism stresses the fact that language is something exclusively human, something as "apart" from nature as the Augustinian God. The well-meaning defenders of man, however, here fall into the compulsory chasm of Western thought, and are indeed as reductionist as Skinner himself, though what they happen to reduce is not man but nature, "the things". But man too and his language are in the repertoire of the atom . . .

What is wrong with Skinner is *not* that he considers man a manifestation of physical or atomic phenomena, which he evidently is, but that he does this in a reductionist way, in order to get rid of those aspects of man which do not fit with his own square, old-fashioned

view on matter and physics. What is wrong is *not* his statement that the behavior of man is the resultant of contingencies. What is wrong is his reductionism; he denies such modes of behavior as do not fit his crude way of thinking, and especially *besinnliches Nachdenken*, and responsibility, the criteria of autonomous man. Even these possibilities enter into the repertoire of the atom, and into the sets of contingencies that man meets.

What is wrong with humanism is *not* that it stresses man as an important and lucid appearance in reality; what is wrong and evil is that humanism, in the compulsory aggressive way of Western thought, puts the rest of creation into the hell of reductionism, outside the gates of love, outside the field of devoted concordance. Only man, in his hybris, considers himself worthy of hermeneutics and emancipation (Apel's and Habermas's terms), whereas the entire non-human reality will have to put up with being measured and sweated by conventional science and technology. We know this ecological proletariat is preparing to strike back. The synthesis of this dialectic conflict (between the crudeness of industrial man and the rest of nature) will be either man's dethronement, degradation or annihilation, or his reconciliation with nature as "the shepherd of Being" (Heidegger). Even Marx anticipated a reconciliation with nature, in classless society, but he saw this reconciliation *within* the industrial system. Heidegger sees the reconciliation *beyond* the industrial system, *das Gestell*.

Man is matter too, muttering matter. Matter matters. The atom has learnt to sea as an ocean, it is quite good at piking, horsing and oaking, it can peak and pine. But *to man* in a fully satisfactory way seems too difficult a task for it, though it is a fascinating one, isn't it? *Matter matters*, not only quantita-

tively. *Das Ding dingt*, "the thing things", says Heidegger. As man the thing thinks, unless it is led astray by reductionism. In reductionism concordance is incomplete, a kind of hate, a refusal to love. Still even reductionism, as a phenomenon, is a miracle, just like our ability to repudiate it. Considerate thinking, like loving, is a manifestation of atomic concordance, or resonance, the very opposite of reductionism. We could overcome reductionism, this typical characteristic of the West, by loving it too, in spite of all, as a mighty manifestation of Being.

Skinner Not a Dualist

While humanists tend to stress and to widen the chasm between man and matter, Skinner, in his awkward way, has realized that the chasm is wrong. Skinner is preposterous. But: *he is not a dualist*, at least he strives toward some kind of unitary science. So he, and behaviorism in general, can be looked upon as a stage in the healing of mankind, though of course behaviorism, as a mode of technocracy, constitutes a deadly danger. By stretching far into absurdity the favourite measuring metaphysical attitude of Western man, behaviorism can point toward just those essentials it purposely turns itself away from. "*Pecca fortiter!*", "Sin with all your might!", said Martin Luther. Personally, in spite of all, I widely prefer preposterous but fearless Skinner to many well-meaning but half-hearted and sophisticated compromisers. The latter are but modified technocrats, and have hardly even begun looking for the Problem Heidegger has been clear about since more than fifty years, e.g., the urgent need of reconciliation with nature, and *in nature*. Skinner has seen the Problem, but his conclusions turn away from man's faculty for *Besinnung*; they make the situation still worse

—but clearer and riper too. He has, after all, a portion of the courage Heidegger speaks about.

What Is the Opposite of Reductionism?

In chemistry terminology, polymerisation is the opposite of reduction. It is symptomatic that scientific language has no term that is the opposite of reductionism. It would be appreciation or love or something. The term reductionism is rather new; it is a symptom of our becoming aware of the dangers of empiricist, analytical science. The very scientific approach is indeed, by method and definition, reductionist, piecemeal, alienated from totality and from essentialities. Reductionism is not deformation of science. It is the essence of science, its mode of behavior. We have just begun realizing that science is wrong, we talk about reductionism. The alternative of reductionism is a total change of science itself and its piecemeal approach. We have not found the alternative as yet, and consequently we have no term for it.

Science as reductionism is a manifestation of Western aggressiveness. Against the doctrine of unified science (physics being the ideal science), humanists plead for pluralism, for knowledge on separate levels which must not be mixed. However, reductionism is in no way a compulsory consequence of monism or unified science. Man too, with his language, with his absurdities like reductionism and behaviorism, is in the repertoire of the atom; man is nothing abnormal for the atom. This does not force us to depreciate or reduce man as a manifestation of "ordinary" matter. It is reductionist man who has made matter "ordinary". Instead we should appreciate matter more; we should not lose our astonishment at the atomic, material forces and possibilities that operate within and around us.

We are the widest window of the atom. But we are caught in the trap of respectable, analytic science and reductionism. We need

re-conciliation, re-confluence with and in nature. We need a word to bear it.

References

- Fuller, R. B., *No More Secondhand God* (Carbondale, Illinois: Southern Illinois University Press, 1963).
- Heidegger, M., *Discourse on Thinking* (London: Harper & Row, 1966).
- _____, *Identity and Difference* (London: Harper & Row, 1970).
- _____, *On the Way to Language* (New York: Harper & Row, 1971).
- _____, *The Question of Being* (London: Vision Press, 1959).
- _____, *Ueber den Humanismus* (Bern: Francke, 1947; Oslo: Cappelen, 1968).
- _____, *Vortage und Aufsätze* (Pfullingen: Neske, 1954). See especially, "Die Frage nach der Technik", and "Das Ding". English translation of the latter: *What Is a Thing?* (Chicago: Henry Regnery, 1968). These two and four other essays from the original volume have been translated into Swedish (Raben & Sjogren, Stockholm).
- _____, *What is Called Thinking?* (London: Harper & Row, 1968).
- Innis, H., *The Bias of Communication* (Toronto: University of Toronto Press, 1951).
- Langan, T., *The Meaning of Heidegger* (New York: Columbia University Press, 1959).
- McLuhan, M., *Understanding Media* (New York: McGraw Hill, 1964).
- Skinner, B. F., *Beyond Freedom and Dignity* (New York: Knopf, 1971).
- _____, *Science and Human Behavior* (New York: Macmillan, 1953).
- _____, *Verbal Behavior* (New York: Appleton-Century-Crofts, 1957).
- _____, *Walden II* (New York: Macmillan, 1948).
- Snow, C. P., *The Two Cultures* (New York: Mentor, 1963).
- Vycinas, V., *Earth and Gods: An Introduction to the Philosophy of Martin Heidegger* (The Hague: Martinus Nijhoff, 1969).
- _____, *Our Cultural Agony* (The Hague: Martinus Nijhoff, 1973).
- _____, *Search for Gods* (The Hague: Martinus Nijhoff, 1972).
- Wagner, F., *Die Wissenschaft und die gefährdete Welt: Eine Wissenschaftssoziologie der Atomphysik*, 2nd ed. (München: Beck'sche, 1969).
- Whorf, B. L., *Language, Thought, and Reality* (Cambridge: MIT Press, 1967).

LOVE ASSEMBLED

Five Poems

**Love moves across the space of our lives
In constellations and solitary beams,
In visible design and free profusion
Following the curve of God's smile
Like stars upon the fabric of the sky.**

*

**Immaculately loosed forth, the incandescence
Of the whiteness, the original lightning
Glances the screen, the sieve translucent
Of golden shade, prism of truth-expression,
And in passage becomes the endless colours
Strewn abroad; yet it maintains, covertly,
The continuum of grace, the single presence.**

*

**The fragrance of a bouquet of light,
Of day jessamine, fills the hours
Of night with the memory of love.**

*

**A softspoken rainbow protests against sullen clouds
With its delicacy and the sunrays it enriches
In a variegated spray, compelling sight and heart
To rise and follow its arc to the apex reached.**

**As when with a solitary child,
Or perhaps like ocean rain,
Quiet gathered, love assembled.**

Tatsat

A member of the Sri Aurobindo Ashram, Tatsat assists the editor of World Union with other publications as well. His poems and reviews have appeared in several journals.

PSYCHOTRONICS AND THE INTEGRATION OF MAN

Psychotronics is defined as the interdisciplinary, scientific study of the interactions between living organisms and their internal and external environments and the energetic processes underlying their manifestations.

Psychotronics recognises that matter, energy and consciousness are interconnected.

The integrated study of these interconnections contributes to new understandings of the energetic capabilities of the human being and other living organisms, life processes and matter in general.

Background

In recent years, there has developed in the scientific and general public an increased interest in interactions and communications which were traditionally considered to be exceptional properties of the human organism. However, it now appears to students of this field that many of these interactions are part of more general interactions of Nature, reflecting its underlying structural organisation.

Because of the lack of development of suitable tools for their investigation, or of scientific paradigms sufficiently broad for their integration into the framework of contemporary knowledge, many of these interactions were overlooked or not considered worthy of objective scientific investigation.

This situation has now changed.

Both leading world nations, the U.S.A. and the U.S.S.R., have recognised that it is necessary to investigate the scientific problems involved in these interactions.

In 1969, the American Association for the Advancement of Science recognised scientific parapsychology as one of the fields necessary for scientific investigation by encouraging the affiliation of the Parapsychological Association.

Articles in the prestigious Soviet scientific journal *Questions of Philosophy* published in October 1973 and Volume XIX of the Great Soviet Encyclopedia (Article 564-565) published in 1975, state the official conclusions of their authors that it is now time to distinguish

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reality from speculation in parapsychology and to investigate the demonstrated and repeatable experimental models of the interactions and phenomena of the field of psychotronics with all the resources of the existing branches of science.

Volume XXIV, number 4 (October-December 1974) of the UNESCO journal, *Impact of Science on Society*, is entirely devoted to some of the issues involved in the science of psychotronics.

The *Canadian Medical Association Journal* of May 8, 1976 (vol. 114, no. 9) published a Kirlian photograph on its front cover and described psychotronics as the new science once the preserve of ancient eastern philosophy.

These statements and the attitudes they express are surely welcome, but there is considerably more involved in the further investigation of specific phenomena in psychotronics than these developments alone would suggest, and it is the opinion of the members of our association that an entirely new qualitative method of research is required.

Parapsychology, by being interested for many years in the psychological aspects of the performance of unusual psychical phenomena by exceptional individuals, has yielded much worthwhile work, but now has become burdened with many old unscientific methods in its many and various branches. On the other hand, the approach of studying any phenomena in isolation with the methods and models of the traditional scientific disciplines is no longer adequate to the task of their proper elucidation. If these phenomena are going to be studied and understood in their complexities and interrelationships with the general structure of Nature, it is necessary to study them in an integrated and interdisciplinary fashion. This is why the scientific workers who formed the International Association for Psychotronic Research (IAPR) decided to develop a qualitatively new approach and this was the main goal of the First International Congress on Psychotronic Research held in Prague in June 1973.

Elaboration of the Definition of Psychotronics

It is the intent of the definition of psychotronics, as the IAPR has declared it, and the scientific thrust that it describes, to:

include the study of repeatedly demonstrable consciousness/energy/matter (i.e. psychotronic) interactions latent within the individual human being or living organism, interconnected psychotronic interactions between the individual and others, and with the inanimate and living organised structures and systems represented in all the kingdoms of Nature;

convey that the study of the fundamental forces or agents involved in psychotronic interactions is now carried out in an interdisciplinary and international fashion, since these forces are recognised as being part of the more general interactions of Nature and thus reflect its underlying structural organisation, and that they are now amenable to observation. This observability is due to the appearance of recently developed tools and methods for their detection and measurement and to the development of new concepts and paradigms for their integration;

recognise that prior to the evolution of psychotronics, the framework of contemporary science had not yet expanded sufficiently to include this study;

state that the concepts and methods of psychotronics have grown into an autonomous science in their own right, having emerged from all of the previously existing branches of science, synthesising them into a new more general framework.

Specifically, psychotronics incorporates the approaches of the psychologies (including scientific parapsychology), biology and the most modern physical sciences (electronics, holography, etc.) and integrates them with other disciplines, and thus, as a whole, transcends each one. For this reason, psychotronics now penetrates anew into each of the existing branches of science, bringing with it a new utilisation of the latent potentials of the human being and living nature, which has the potential to benefit all of mankind.

It is not the purpose of the definition to espouse any specific ideology, but to incorporate those universal values of interconnectedness, synthesis, unity and goodwill, whose application can improve the quality of life for mankind as a whole.

The definition of psychotronics intends to lead to an effective scientific contribution to the implementation of the spirit, purposes and principles embodied in such general documents as the Charters of the United Nations, the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the World Health Organisation, the United Nations University, the Universal Declaration of Human Rights and the 1975 Helsinki Conference on Security and Cooperation in Europe.

First Congress of the IAPR, Prague 1973: Standardisation

The First International Congress on Psychotronic Research was devoted to the establishment of the science of psychotronics for ways and means of unlocking the tremendous unused latent capabilities of the human organism, the possibility of the discovery of a new form of energy associated with living processes and the standardisation of terminology and approaches in the field.

It was at this congress that the IAPR was founded by its participants.

Second Congress of the IAPR, Monte Carlo 1975: Methodology

The goal of the Second International Congress on Psychotronic Research was to establish the main methodological principles and procedures of research in psychotronics and to integrate positive results of both the former research in scientific parapsychology and the approaches of the traditional scientific disciplines.

In keeping with the scientific method, psychotronics is concerned with making models for experimental verification which can be demonstrated repeatedly, specifically including, however—not denying—the participation and resultant influence of observers in interactions. Psychotronics is concerned with the use of appropriate scientific apparatus for the detection of energy transformation processes and with the design and construction of new and more

effective apparatus. The overall goal is that of achieving results which can be used in practical applications as soon as possible.

This approach has already yielded worthwhile results, which are already in practical application in many countries of the world. These reflect new discoveries in the recognition of the potential of the human organism and its so far undiscovered capabilities for interaction and energy transformation with living Nature and with the environment in general.

These include applications of studies of biological structure, biological energy and biological radiations of many kinds, such as:

the acceleration of rehabilitation processes in the so-called "distance-myotransfer" phenomenon, where the bioenergy of the healthy hand helps to influence the muscular parts of an ill hand;

successful training of improved psychological integration and voluntary self-regulation, creativity and intuition through the use of biofeedback instrumentation and perception training in the alleviation of psychosomatic incoordination and illness;

the activation of matter, particularly water, by bioenergy, which has led to secondary applications such as the fertilisation of plants, which avoids the unwanted complications of chemical fertilisers;

use of the biophysical effect in the location of natural resources;

investigation of the energy transformation processes involved in bioenergotherapy through the study of the method of integration of the so-called biological plasma or "cold plasmas of organic origin" along with methods of photography for detecting so far unknown interactions between the organism and matter;

use of new methods of photography and other methods of detection of the electrodynamics of the acupuncture meridian system in interaction with laser radiation and in psychophysical integration training procedures;

the use of detection of synchronous neurophysiological processes and electromagnetic field changes between organisms to investigate distance communication between them.

In addition, there have been developed new ideas for integrating the theoretical framework of psychotronics, such as:

unified field investigations and multidimensional geometric symmetry principles and models derived from the study of energy-matter transformations in modern physics, holography and naturally occurring symmetrical structures;

study of the differential functions of the cerebral hemispheres and the tremendous unused latent information processing capacities of the human brain;

study of the relationship of bioenergy processes to bioactive shapes;

the study of genetics and patterns of growth;

the study of imagery/energy information fields, perception and the communication processes of consciousness,

to name but a few.

Third Congress of the IAPR, Tokyo 1977: The Integration of Man

The purpose of the Third International Congress on Psychotronic Research is to bring forward to the Japanese public, in an international forum, the new attitude and methods of investigation of the scientific phenomena of psychotronics and the results and possibilities of their practical applications.

In keeping with the theme of the congress, presentations will be directed towards the question, "What is the potential of the human being and how can that potential be achieved?"

Students of the future predict two alternatives facing modern man: George Orwell's vision of 1984—that of an impoverished and docile civilisation, mentally enslaved by modern technology—or that more positive vision which could be a consequence of the raising of the whole level of planetary consciousness and the human knowledge of, and ability to use, the human potential.

To bring about this latter possibility, "the integration of man" is a goal to be achieved at intrapersonal, interpersonal and global levels. To this end can be brought the integration of the paradigms and methods of science together with those of the humanities to bring about a new human integration and human competence to the most modern of mankind's technological achievements. Not only does "the integration of man" include the integration of man himself and with his science, it also includes his integration with his total natural environment.

The congress will be organised into the following working sections, each working with various subthemes:

1. Psychotronics and Physics/Biophysics
—"Biological Radiation and Field Theory"
2. Psychotronic General Systems and Medicine
—"Biological Structure, Biological Energy and Healing"
3. Psychotronics and Anthropology
—"Consciousness and Society"
4. Psychotronics and Pedagogy
—"Creativity and the Design of the Future"

There will be demonstrations, exhibits, films, workshops, opportunities for interpersonal exchanges with world renowned investigators and visits to research laboratories in addition to major public gatherings for discussion of major events of the congress. Shortly following the congress its proceedings will be published.

You are cordially invited to take part in the activities of the congress on your own behalf, or that of your organisation, and to write to the secretariat in Canada for further information, which will become available as further plans unfold. The address is: IAPR Secretariat, 43 Eglinton Avenue East, Suite 803, Toronto, Canada M4P 1A2.

Taking place seven years before the projected manifestation of Orwell's apocalyptic vision, the congress will attempt to bring to the attention of the community at large those potent and liberating ideas and methods, based on scientific achievement, which could release a new energy in human affairs and reverse this sobering prediction.

AUROSCIENCE

A Science of a New Consciousness

Alexander Brodt

*New words are needed to express new ideas,
new forms are necessary to manifest new
forces.*

the Mother

Introduction

The adventure of a new consciousness is under way in all corners of the planet, in all fields of knowledge and life. All over the world a great metamorphosis catalyzes: new Weltanschauungen and lifestyles, new education, science and spirituality, new societies and communities, a new way of thinking, experiencing and growing—an ardent search for “something else”, something true and real, a new self- and world-awareness and a new self- and world-delight. We live today in a period of transition and the crises and revolutions which we witness pervading our century are the birth-throngs of a nascent new aeon: the Space Age, the Age of Human Unity, the Aquarian Age, the Age of Truth, or however else one may refer to it. Whatever the name, all lenses converge on and focus the central fact that a new world and a new humanity are emerging. A subtle symbiotic network is forming and growing with the aim to develop the instruments and create the methods, to hew out the paths for the future transition, within and without, to the next cycle of the ascending helix of human evolution. It has now become ominously clear that the centres and props of the past cannot hold the future's vast circles without circumferences and its marvel-structures of a new dimension of consciousness.

Auroscience, a new approach to mental dynamics and knowledge in their totality, represents an attempt to fashion such a transition-instrumentality towards the future in the dimension of the intelligence. Auroscience is essentially a discipline and a science that aims at training and enabling the mind to attune itself to the new consciousness, the Truth-awareness, which is visibly emerging on earth, to receive its influence and resonate with its move-

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ment, to perceive and comprehend in its light, to create and act in the world, manifesting its integral harmony, its play of diversity securely founded on an ever-present unity; to follow thus its ascending curves of exploration, growth and mastery of ourselves and of our inner and outer environments, in as much as an enlightened mentality can participate therein and serve these ends.

Three are the fundamental components which interweave to constitute Auroscience.

1. *Aurologic*: An enlightened mental dynamics, in which the mind attempts to be the instrument of the wholeness and truth of existence, and which replaces the divisive and illusory rational logic with Aurologic, an infinite and integral as well as concrete and practical system based on the truth-logic which underlies existence itself.

2. *Auromethod*: In this new methodology the archetypal harmonies, patterns and powers of Reality are arranged in their cycles, systems and hierarchies which constitute the fundamental structures of being and dynamics of becoming pervading individual, universal, and supracosmic existence. The resulting ontological consciousness-force field serves as a vantage-ground for the postulating of hypotheses and as a manifold paradigm of the procedures, methods and principles for any type of Aurological research and truth-thinking's acquisition of knowledge in general—holistic knowledge which extends itself over all provinces of Reality and interrelates and synthesizes its spiritual, occult and material aspects.

3. *Auroknowledge*: This new system of epistemology, established through the logic and methodology of truth-thinking, is founded on the inner truth of all the branches and ramifications of the tree of knowledge. The object of any area of learning is always an aspect of the existence, and so this epistemology founds itself on the structure of existence: the tree of knowledge is manifested as the reflection of the cosmic tree in the dimension of thoughts and words, and the inner being and soul of knowledge are incarnated in a harmonious and truthful mental replica and material body.

These three constituents of Auroscience form a true synergism, a unity and totality which is not merely an addition of each part but a transcending and a transformation of these into something completely new. Theory, practice and application, the inner being and the outer body of knowledge, the states and operations of the mind are fused into a dynamic and interrelated whole. Auroknowledge can thus be defined as a new science and new art of knowledge in the light of Sri Aurobindo's revelation, an attempt towards a creative formation and application of his teaching in the three aspects of knowledge: (1) comprehensive illumination and creative thinking; (2) research and acquisition of knowledge; (3) its structure and classification.

I. Aurologic

A. Truth-thinking

A new humanity . . . would be possessed already
of what could be called a mind of Light,
a mind capable of living in the truth,
capable of being truth-conscious

and manifesting in its life a direct
in place of an indirect knowledge.
Its mentality would be an instrument of the Light
and no longer of the Ignorance.¹

Truth-thinking is a step in the direction Sri Aurobindo shows above, an effort towards this aim. It can be defined as an enlightened mental dynamics which attempts to implement a holistic, transparent and creative thought-process based on a truth-conscious functioning of the mind. Truth-thinking serves as a discipline and technique for the human intelligence to open itself to a truth-knowledge and luminous wisdom which appertain to the supramental dimension of a gnostic Truth-consciousness or Logos, secretly and overtly governing the cosmos and the *ontos*. It thus enhances a transmutation and new-creation of the intelligence into an instrumentality of the light, an agent and medium for comprehension, creation and world-action reflecting the wisdom of the Logos.

*Its mentality would be an instrument of the Light
and no longer of the Ignorance.*

In the normal mental attitude and condition of the past, the mind proceeds from ignorance to superficial and antagonistic fragments of half-knowledge, and claims to be the judge and determinant of truth. In truth-thinking this status quo is reversed: the mind accepts that real knowledge and truth lie beyond it, are proper only to the Truth-consciousness; it can only receive and mirror knowledge and serve as a delegate, instrument and channel for the truth; it has to open itself to the influence of the higher principle of the Logos so that this can transmute and new-fashion the lower instrumentality into a faithful and pure agent of its wisdom.

Therefore, as an initial step, the fundamental truths of Reality revealed by Sri Aurobindo, the harbinger of the Truth-consciousness, are taken as the vantage-ground and the foundation of all mental activity, and it is in their light that all is approached, not only in theory and *Weltanschauung*, but also practically in all areas of knowledge and activities of the mind. Truth-thinking relates with a progressive concreteness and intimacy all thinking, research and acquisition of knowledge to these central and integral truths of Reality. The latter are thus interwoven with and brought to bear on all walks of mental life. They are applied and implemented dynamically, instead of being merely known without relation to and impact on the manifold branches of learning. This unifying approach to all knowledge heals the schisms between its diverse provinces. It establishes as an overt continuum all branches of the one tree of knowledge—a continuum in which all aspects of learning interact and interpenetrate, rigid and narrow borders and categories dissolve. (For instance, the material, the occult and the spiritual—which are but different foci of the same search for knowledge about the one

1. Sri Aurobindo, *The Supramental Manifestation upon Earth*, Sri Aurobindo birth centenary edition, vol. 16 (Pondicherry: Sri Aurobindo Ashram Trust, 1972), p. 67. All future references to Sri Aurobindo's works are to the centenary edition.

Reality—each blend and overlap with the other two.) In the resultant symbiosis and harmony all disciplines enrich themselves mutually and find in their unity of common all-embracing truths the foundation for their reconciled diversity, as well as for a profound and true illumination and enlargement of their body of knowledge.

Truth-thinking proceeds thus not from ignorance to partial knowledge, but from fundamental truth and essential wisdom towards general, special and practical knowledge.

*and manifesting in its life a direct
in place of an indirect knowledge.*

The premise for a reaching out towards a direct knowledge—and so too the basic principle of truth-thinking—is the multiple oneness of all existence. In this context, the practical implication is that all knowledge consists essentially in the manifold knowledge of the one Reality. "One Reality", however, does not here mean that truth-thinking only focuses on what lies beyond all life and manifestation, but rather implies a transcendence of the surface-appearance and illusive isolatedness of all things. Truth-thinking approaches everything as a figure and manifestation, a symbol and parable of this Supreme Reality. It tries to fuse all fields of knowledge, until this reveals, in essence as well as in outer body, the one Reality in its manifold self-manifestation. On the premise that there is only one knowledge in many forms and aspects, the three cardinal operations or movements of truth-thinking are founded, which lead to a direct knowledge: *integrality, transparency and creativity*.

Integrality is achieved by approaching everything from the totality of existence, the entirety of its specific super-system, the wholeness of its individual being. Truth-thinking is a march from the whole to the portion and detail, from the higher to the lower which it encompasses, from the essence to its embodiment. Everything is viewed against the background of the basic truths of the integral Reality. In this way the remembrance of and mental contact with the Reality is sought to be established and kept alive as a constant vibration and presence in the mind, as the stage and wing for all thought-processes.

Thus one does not focus on each phenomenon as an individual entity at first and then (if at all) relate it to other things; but instead the fundamental knowledge of the Reality becomes the starting-point for the study of each thing, whose subtle as well as material individuality is approached with an ever-present plenary vision of the Reality, however abstract this vision initially may be. Likewise each phenomenon is investigated and gauged from the perspective of its individual wholeness and essence, and the lower movements of existence are approached from the vantage-ground of a knowledge about the higher ones. Evidently, if we consider all being and becoming a progressive self-manifestation of the one supreme Reality, it follows that the function and nature and essence of each part need to be apprehended in the context of the totality. To use an analogy, it is quite useless, if we want true knowledge, to study the human hand only up to the wrist, without relating it always to the whole human being. All the strange and senseless movements the hand performs as well as its form and nature, equally unintelligible in the cut-off state, enable one to gain no

real knowledge about it unless they are seen in relation to all the other parts of the human organism and personality.

Integrality in the approach to the outside is sustained by and enhanced through the complementary effort towards integrality within through the expansion of one's consciousness. Here truth-thinking pursues the movement from the linear to the global mind, from the isolated intelligence to a vast universal one, from identification with the physical being to identity with one's spirit which stretches in every direction to the infinite. Every effort, method, and technique which helps in the expansion of consciousness falls within the province of integrality, which offers a suitable path towards an integrated personality and mind, a holistic growth of consciousness. Integrality progressively leads thus from the identification with only a part of our being to the awareness of our full existence. Regardless of how vague this awareness may be at first, it still constitutes the sole true prop which can sustain a functioning and collaboration of all the parts of our psychological make-up and their interaction with all inner and outer environments in a symbiotic, syntropic and synergistic resonance with the central truth of our being. So a formula of the inner and outer movement of integrality is established: *from the whole to the part*

Transparency is applied here in the literal sense of its root, the medieval Latin verb *transparere*, to be seen through, to show through. It here first implies transparency of mind, the state of receptivity, openness and sensitivity in which the mentality becomes a limpid medium capable of receiving the messages, images, vibrations, "consciousness-forces" of Reality in a clear and faithful manner. It is analogous to a window which enables a clear sight and allows light-rays to pass through it without distorting or partially eclipsing them. The second implication is the dynamic transparency of mental activity which is achieved through the effort to make an object of knowledge translucent to the awareness, i.e., the effort to look behind the surface appearance, to penetrate the subtle reality and to search for the inner truth of each thing, which is veiled by the crust of our senses and our reason.

First, our own mind has to grow transparent, for only the consciousness, which is transparent and subtle itself, can become aware of the corresponding subtle vibrations in other things and beings and in the whole outer environment. One can only become conscious of oneself; all that reason—which is a dividing and closed and so necessarily a conditioned and limited medium—perceives is a reflection of itself. This is so because (besides the truth that there is only one Self) the mind functions like a radio or television receiver. Only those wavelengths the frequency of which it is capable of receiving reach it. In order to expand the mind's range it has to grow in transparency, for this is the way in which our mental receiver can open to ever more subtle waves with ever longer and also shorter wavelengths, as it were. Just as the still surface of water undisturbed by ripples acts as a perfect mirror, so too the mind which is silenced and quietened becomes a translucent glass: it does not distort or deflect the "light rays" it receives but reflects what would otherwise be invisible in the foaming sea. In order to reach a new range of frequency, the first step is to leave behind the old channels and to pass through the silence which lies between them and the new range. In silence and quietness the mind grows in transparency. It must learn to wait in a stilled concentration for the right wavelength to come through.

The mind grows in its capacity to be transparent by simply aspiring for it and trying it, by an effort, a constant directing of the will on the goal to be attained; it is like a child who learns to play a game by trying it and playing it with enthusiasm, or the intelligence that develops and matures through the very process of thinking, of exercising the brain. So the very attempt to be in the stilled and receptive state of transparency, and the effort to penetrate the inner being behind the surface-appearance of existence and individual phenomena, themselves constitute the path to be followed. Here also, this general course embraces a wide range of the most variegated special methods, disciplines and training-programmes, which can be applied according to personal penchant.

The outside is a reflection of the inside: the translucency within the mind leads to the same without. The inner nature of a phenomenon becomes visible, radiates through the surface and discloses the essential principle and the subtle play of forces materialized in the outer physical reality. Then only will the latter be really understood, for it is in the light of the spiritual essence and the hidden inner being which motivate the material and outer nature that the latter is fully and truly comprehended. The true nature of an iceberg can evidently not be grasped from the small part above the surface of the water; it reveals its larger reality in the secret extension below. The movement of transparency follows the direction expressed by its formula: *from the within to the without*.

To the totality and absoluteness of integrality and to the inner essence and being of transparency, *creativity* adds the dynamis of motion and becoming. It is the medium for the attainment of the first two operations of truth-thinking, and is as well their instrumentality of self-revelation. For it consists on one side in the widening, heightening and deepening of the consciousness and, on the other, in its action and play and self-expression. It corresponds thus to the evolutionary movement which leads to ever higher forms of consciousness and more perfect manifestations of the latent potentialities of the evolving Reality. Creativity can then be defined as the dynamis underlying all growth of consciousness as well as the totality of its self-manifestation. Practically, this includes all effort and striving towards the new and the future, towards the original and truly individual. Growth of consciousness necessarily implies that the old state of awareness must be abandoned and consequently demands a concentration on what is yet beyond and unattained, on what is new and belongs to the future. With regard to the surpassing of the social, cultural and racial programming of the so-called "individual" human personality, it is obvious that anything which leaves behind the established molds can be called original and also individual.

Creativity is therefore founded on the activation of the latent inner potentialities of the mind and on the cultivation of all that aids an opening to the Truth-consciousness and facilitates its influence and working in the intelligence. The basic faculties and agents of the Truth-consciousness which need to be developed in the mind are: imagination in the sense of truth-conception; inspiration or truth-hearing; intuition, that is, truth-vision; comprehension, a truth-intelligence; truth-resonance as a direct vibrational contact with the object of knowledge; revelation, a synergism and culmination of all the former, truth-experience. The development of these faculties adds to the six senses evolved in the past (taste, smell, touch,

hearing, sight, mind) and so brings the organs of mental consciousness to a greater completeness.

These faculties already exist rudimentarily as a disposition and tendency in the mind. Truth-conception is creative imagination attuned to the truth of Reality and functioning in harmony with it, as a tool for the conception of possibilities in accord with and reflecting the evolutionary movement of existence. Inspiration and intuition are among the fundamental agents behind science and the arts. "My intuition tells me" is a standard phrase among top scientists and the "sudden flash of intuition" which makes one "see" is a common experience. Equally, inspiration needs no exposition; phenomena such as a poet receiving and hearing a whole poem line after line are reported and documented. The fragmentary, divisive and abstract rational comprehension already hints at its holistic, synthetic, dynamic and more direct equivalent of a truth-intelligence. The direct vibrational contact which, for instance, a work of art or an intense experience in life often communicates, has become a prominent and important factor in the life of the new generation. Their jargon reveals it; expressions like "picking up the vibes", "getting the feel of a thing", and "flowing with the movement", indicate the direction which truth-resonance pursues in the process of a direct, conscious contact with the nature and movement of a thing. Lastly, the various transpersonal, occult, spiritual, and dream experiences fall within the field of revelation.

A very prominent example of such a truth-experience is the often cited case of the chemist, August Kekulé,² whose dream-vision revealed to him in 1865 the ring-structure of benzene. This discovery has been regarded as the "most brilliant piece of prediction to be found in the whole range of organic chemistry". His own words expose his experience so beautifully that they deserve to be cited:

There I sat and wrote my *Lehrbuch*, but I did not proceed well, my mind was elsewhere. I turned the chair to the fireplace and fell half asleep. Again the atoms gamboled before my eyes. Smaller groups this time kept modestly to the background. My mind's eyes, trained by visions of a similar kind, now distinguished larger formations of various shapes. Long rows, in many ways more densely joined; everything in movement, winding and turning like snakes. And look, what was that? One snake grabbed its own tail, and mockingly the shape whirled before my eyes. As if struck by lightning I awoke. This time again I spent the rest of the night working out the consequences.²

The phrase, "My *mind's eyes*, trained by visions of a similar kind" speaks for itself. So we see that the growth of consciousness for which creativity works has its starting-point in the initial and rudimentary, yet today more and more emerging potentialities of the mind.

The above outlined beginnings need to be developed, regularised, purified, heightened

2. David J. Eggenberger, ed., *The McGraw-Hill Encyclopedia of World Biography*, vol. 6 (New York: McGraw-Hill, 1973), p. 163.

and extended so that they become the normal functioning of the intelligence and can replace the cruder, heavier and more awkward rational machinery of the past. For this purpose, integrality and transparency set the stage on which creativity can evolve such an enlightened mode of truth-thinking. The whole of Aurological truth-thinking, or more precisely, the whole of Auroscience, presents a path, a discipline, a training for this goal, an attempt to bridge the thought-process of the past with the mental dynamics of an illumined future.

The remaining aspect of creativity is the manifestation of this inner development and progress in the mental activity, in the process of understanding and creating. Truth-thinking has of course nothing to do with the usual mental game of finding a foreknown answer to a question, or an answer which is predetermined by the framework of a fixed and narrow Weltanschauung and a rigid scheme of thinking which leave us only with a small excerpt, a fraction of the multidimensional, infinite Reality. In its creative flexibility, truth-thinking aims instead to develop new answers in new-created modes and forms and from different angles of vision to the sole eternal sphinx-riddle, the one equation with its infinite possible solutions. Complementary to this creative acquisition of knowledge is the formative dynamism of its expression: the inexhaustible play, the urge to invent new vessels—symbols, parables, analogies, systems, worlds—in the attempt to incarnate the Inexpressible with a growing dynamic perfection and fulness. To creativity's drive for progress and growth, to its movement from the achieved to the next evolutionary target, corresponds, then, the formula: *from the near to the far*.

The practice of this threefold operation of truth-thinking inevitably leads to a progressive Truth-awareness.

capable of being truth-conscious. . . .

The Truth-consciousness is constituted of a triune principle, which is best grasped in the light of the Vedic formula: *ritam, satyam, brihat*, Right, Truth, Vast. In Sri Aurobindo's words:

Ritam is the action of the divine knowledge, will and joy in the lines of the truth, the play of the Truth-consciousness. Satyam is the truth of being which so acts, the dynamic essence of the Truth-consciousness. Brihat is the infinity of Sachchidananda out of which the other two proceed and in which they are founded.³

The three movements of truth-thinking are intimately linked with these: integrality corresponds naturally to the Vast; transparency of the mind aims at making the essential Truth of each object of knowledge visible and tangible; the Right is reflected in creativity, in the playful and creative action proceeding from and leading to the other two. The three processes of

3. Sri Aurobindo, *The Synthesis of Yoga*, vol. 20, p. 467, footnote.

truth-thinking constitute the essential dynamics, the central sun from which emit the instrumental rays which serve in the detailed and active thought-process necessary for a successful coping with all aspects of terrestrial life and human knowledge. For the mind to actively become conscious of the Logos, to reflect it in all fields of the thought-process, the three basic movements need to be further elaborated in an infinite and integral logic which embodies the three aspects of the Truth-consciousness. Aurologic, which is outlined in Part B, represents an attempt in this direction to base a system of logic on the Reality's truth-logic. The result of practicing this transrational logic is naturally a growing presence of the Truth-consciousness and an intimate relationship with it.

a mind capable of living in the truth. . . .

Truth is to be lived and experienced; and even on the mental level it cannot be something similar and corresponding to—though greater in capacity and power than—dry reasoning and intellectual abstraction. The working of the Truth-consciousness is not abstract and theoretical—it is a practical reality and concrete experience. As has been said, truth-thinking and Aurologic are first an aid and a discipline to open one's mind to the Truth-consciousness which constitutes the earth's fourth dimension of awareness, the logo- or truth-sphere (the other three being the geo-, bio- and noospheres). Truth-thinking further serves as an instrumentality for mental action and expression, a medium which directs the influence of the Truth-consciousness towards the active thought-process and so canalizes and concentrates its working in the functioning of the brain and its action-range. This intensification and enlargement of the logosphere's dynamic influence in the working of the mind has as its aim the substitution of the dividing and narrow human reason and physical mentality by a free and open and vast intelligence, a new awareness sustained and forged by the Truth-consciousness. This holistic, transparent and creative new mentality is to a certain extent independent of the rational intelligence, as it is not based on the increase of the reason's capacity, but on a transcendence of the rational mind. It is a transcendence of the rational mode of functioning which is sought, but not of the rational field of activity. Truth-thinking is an effort toward a new and enlightened mode of functioning working in all the domains of thought and life, from the most subtle to the very down-to-earth, which until now were commonly managed by the reason and the physical brain-mind.

The presence and working of the Truth-awareness can only lead to an ever-expanding truth-life of the mind, including the physical mentality. The mental principle is consequently transformed into something beyond it, so that it becomes the self-luminous transition-mentality on the way towards a gnostic dimension of existence and awareness: the fourth dimension of the Truth, the Supermind as Sri Aurobindo calls this next supreme target of terrestrial evolution. The path to it leads through the stages of a new human being and the cosmic man, and ultimately to the attainment of a divine supermanhood. The "physical mind receiving the supramental light", this transition-mentality, "Sri Aurobindo called the Mind of

Light.”⁴ Its essential functioning and evolutionary role is described in his last writing, *The Supramental Manifestation upon Earth*. The mind of light is the basic goal and realization which Aurological truth-thinking as well as Auroscience as a whole strive to attain; a goal culminating in a new human being, truth-conscious and self-aware:

*A new humanity . . . would be possessed already
of what could be called a mind of Light. . . .*

B. Aurologic: The Foundation

To understand truly the world-process of the Infinite and the Time-process of the Eternal, the consciousness must pass beyond this finite reason and the finite sense to a larger reason and spiritual sense in touch with the consciousness of the Infinite and responsive to the logic of the Infinite which is the very logic of being itself and arises inevitably from its self-operation of its own realities, a logic whose sequences are not the steps of thought but the steps of existence.⁵

Aurologic seeks to base itself on the logic of the Infinite. It is an attempt to incarnate the Infinite’s truth-logic—the essence of which is expressed by the triple idea of the Vast, Truth, Right, of integrality, transparency, creativity—in its corresponding ninefold body. This body consists of the nine archetypal processes of creation, the fundamental operations which underly the whole of existence: abstractly in the logic of the Infinite and concretely in the marvelous process of manifestation itself, in the universes and all being and becoming. Aurologic attempts in this way to follow the very steps of existence, its own self-operations, and consequently the logic of Reality itself. For only this enables a holistic mental logic which is really capable of understanding the Reality in the light of the Truth.

The reason observes existence through the limited and conditioned spectacles of a logic born from the linear mode of the rational intelligence. Bearing its stamp, it moves from one distorted cut-section to another. Instead of narrowing the Reality to the mode of the observational organ, Aurologic tries to adjust the instrumentality of observation to the very processes of Reality itself, and so “expands the spectacles of logic” until they are tuned to and resonate in harmony with the integral and dynamic modes of the logic of the Infinite. Only so can the Reality be reflected in an enlightened mentality—as much as what is infinitely greater than the mind and can never be fully grasped by it can be mirrored in its enlightened counterpart. Evidently, the object to be reflected cannot be expected to adjust itself to the mirror (as rational logic attempts in a Sisyphus labour), but the mirror must be polished and clear, sufficiently vast and capable of undistorted reflection in order to catch an image of

4. The Mother, quoted in K. D. Sethna, *The Vision and Work of Sri Aurobindo* (Pondicherry: Mother India, 1968). See the essay, “The Supermind’s Descent and ‘The Mind of Light’”.

5. Sri Aurobindo, *The Life Divine*, vol. 18, p. 475.

Reality which in truth corresponds to it. It still is, of course, only an image, a symbol, for, "But thought nor word can seize eternal Truth".⁶ However, though they cannot seize it, they can serve it as agents for comprehension and action in the world, and for the advancement of the cosmic labour of evolution; that is, practically, for the manifestation on earth of the next evolutionary level of consciousness beyond the mind, the logosphere or supermind. In the same way that rational logic can be defined as the science and art of reasoning, so Aurologic can be defined as the science and art of truth-thinking, of a suprarational mental dynamics open to the influence of the logosphere.

The keynote of Aurologic is an integral, infinite and multiple oneness. A oneness which unites the transcendent One, *Tat Ekam*, "That One", with its complements, the universal and the individual One, of which the Upanishad also proclaims: *Sarvam khalu idam brahma*, "All this is Brahman." This integral truth is expressed in, "That is the One, the All, the Many", the *auromantra* of a logic which harmonizes and synthesizes individuality, universality and transcendence, the three complementary aspects of the Reality. The all-inclusiveness is expressed in the nine pillars of Aurologic, in which truly All is the One that is the Many. Chart 1 denotes these nine logical operations.

CHART 1

One-in-One
One-in-All
One-in-Many

All-in-All
All-in-Many
All-in-One

Many-in-One
Many-in-Many
Many-in-All

These nine processes are movements of consciousness; they are not only logical operations which the mind can learn to perform in order to attune itself to the truth and the infinite oneness of the Reality, but they exist on every level of consciousness from Spirit to Matter. For these are the fundamental processes through which all existence is created. On every plane of consciousness these nine operations are executed in the characteristic manner of each particular mode of being. This is naturally so, since all is one, the same essence only differently manifested.

The following explanation clarifies from occult, mathematical and metaphysical perspectives the truth behind the nine processes. First, there is the numerological significance

6. Sri Aurobindo, *Savitri*, vol. 28, p. 276.

of the number nine, which according to the Mother symbolizes "process of creation".⁷ Therefore, clearly, the number nine is intimately linked with the process of creation, which is expressed on the plane of numbers as nine because this process is ninefold. If we transcend the linear notion of a number and look at it from a higher dimension, it unfolds like a geometrical figure. As to the two-dimensional square the three-dimensional cube corresponds, likewise, the number nine becomes in a higher dimension the ninefold nine. The numerological significance of the number nine is an "occult reality"—which is only a name for an existing supraphysical truth and phenomenon—inherent in the number: a symbolical and yet concrete translation of a supraphysical principle into another dimension, the world of numbers.

From this foundation, we can proceed to the next truth, the mathematical one. A mathematical definition of a supraphysical truth is nothing astonishing if we consider how valuable a language mathematics proves itself to be in the fields of abstract thought and material science. One aspect of mathematics is precisely that it is a language sufficiently capable of harmonizing the fixed with the subtle, the finite with the infinite. As the eminent mathematician Hermann Weyl pointedly defined it: "If one wants to use a short slogan which hits the very centre of mathematics, then one may well say it is the *science of the infinite*".⁸

Consequently, it constitutes an ideal medium for the expression of the truths, principles and laws of the Reality. What in the field of humanities is represented by art, which gives to the soul the concrete touch and vivid emotion and revealing vision of things here and beyond, would in the area of science be an illumined mathematics—which expands its realm into the totality of existence—materializing and actualizing to the intelligence the elusive, the subtle, the infinite. And this it would realise not only in the linear and partial way of the past, but in the multidimensional, integral manner of the future, in which the infinite contains many infinitudes and is really limitless in every dimension and direction. Non-Euclidean geometry and Cantor's various types of infinite sets can be said to mark the commencement of such a breakthrough into new dimensions, a development which since then has been gaining an increasing momentum.

It is self-evident that the mathematical side has to be regarded not only from the purely external and mechanical point of view, but through the esoteric vision of truth-thinking. The mathematical formula which expresses the ninefold dynamis of creation is: $1 = 0.\overline{9}$; the bar on the top of the nine means an infinite recurrence of nines: 999 . . .

The proof for this formula is:⁹

$$\begin{aligned} 1/3 &= 0.\overline{3}; \\ 3 \times 1/3 &= 3 \times 0.\overline{3}; \\ 1 &= 0.\overline{9} \end{aligned}$$

7. A tape-recorded conversation of 18 November 1955.

8. Hermann Weyl, quoted in Walter R. Fuchs, *Mathematics for the Modern Mind* (New York: Macmillan, 1967), p. 97.

9. There are more mathematically rigorous and therefore complicated proofs. This simple version is, however, within the reach of every nonmathematician.

It remains now to evaluate this result in the light of truth-vision. The first step for this consists in the right reading of the formula. This necessitates a preliminary consideration of the 0—pronounced “circle”, and not “zero”—which is usually identified with, or rather confused with, nothingness. However, Sri Aurobindo explains that this is only the dwarf-mind’s distorted vision of the Absolute, which in truth is the supreme wholeness and infinite plenitude.

Nothing can rise from Nothing. Asat, nothingness, is a creation of our mind; where it cannot see or conceive, where its object is something beyond its grasp, too much beyond to give even the sense of a vague intangible, then it cries out “Here there is nothing.” Out of its own incapacity it has created the conception of a zero. But in truth what is this zero? It is an incalculable Infinite. 10

We can now read the formula:

1 the One, the supreme Existence (*Sat*)
 = is
 O the supreme Reality (*Tat*)
 · in its self-contained state, holding in itself, being the seed-state of,
 9 an infinite dynamis and process of creation (*Aditi*).

We may refer here to an excerpt of Sri Aurobindo’s ontological “Divine Plan” as it appears in a collection of his unrevised manuscripts, *The Hour of God*.¹¹

First Absolute— <i>Tat</i>	The Absolute Transcendent, the Supreme, <i>paratpara</i> (containing all, limited by nothing).
Second Absolute— <i>Sat</i>	The supreme self-contained absolute Existence, Sachchidananda, (Ananda uniting Sat and Chit), holding in its absolute unity the dual Principle (He and She, <i>saḥ</i> and <i>sa</i>) and the four-fold Principle, OM with its four statuses as one.
Third Absolute— <i>Aditi</i>	Aditi is the indivisible conscious-force and Ananda of the Supreme; the Mother, its living dynamis, the supreme Love, Wisdom, Power. <i>adya sakyi</i> = <i>parabrahman</i> of the Tantra.

The difference we see between Sat and Tat is subtle. The absolute, transcendent Reality, for the sake of self-manifestation, for the delight of the divine play, for the heroism of becom-

10. Sri Aurobindo, *The Hour of God*, vol. 17, p. 48.

11. *Ibid.*, p. 28.

ing, takes the aspect of the One, the supreme self-contained unity, that holds all in itself, that is the seed-state, as it were, of all being, all dynamis, all creation.

The only difference between Parabrahman¹² and Parapurusha is that we think of the first as something beyond our universe-existence, expressed here indeed, but still inexpressible, and of the second as something approaching our universe-existence, inexpressible indeed, but still expressed.¹³

This original and supreme aspect of the Reality is defined in the mathematical formula exactly as Sri Aurodindo does: The supreme Existence is the Absolute Reality's aspect of absolute self-contained unity, holding in itself, as well as being the seed-state of an infinite dynamis of being and play and becoming, an inexhaustible process of creation and self-expression: $1 = 0.999999999 \dots$

There remains now the last truth, the metaphysical, ontological one: One-All-Many is a simple and yet vast and all-embracing formula of the fundamental trinity of the existence: the multiple Individualities, the Many; the universal and also supracosmic All; and the ever-transcendent One. Many are the forms and the names under which the eternal trinity presents itself to us: Ishwara, Shakti, Maya; Sat, Chit-Tapas, Ananda; the Father, the Holy Ghost, and the Son; God, Nature, Man; Vast, Truth, Right; Brahma, Vishnu, Shiva; Purusha, Prakriti, Jiva; the Beyond, the Outside, the Inside; the Absolute, the Objective, the Subjective; the Spirit, the Universe, the Psyche. These are only a few examples of the three-in-one, which are the soul-reality, the essence, of all manifestation and creation. Complementary to this archetypal three-in-one is the ninefold dynamis and becoming, into which it constellates and self-multiplies in the eternal play of an infinite self-revelation. A look at the scheme in Chart 2 makes it clear that there are nine, and only nine, *basic combinations* of One-All-Many.

CHART 2

	ONE	ALL	MANY
ONE	One-in-One	One-in-All	One-in-Many
ALL	All-in-One	All-in-All	All-in-Many
MANY	Many-in-One	Many-in-All	Many-in-Many

12. See, *ibid.*, p. 69: "The Upanishads speak of the Absolute Parabrahman as Tat; they say Sa when they speak of the Absolute Parapurusha."

13. *Ibid.*, p. 68.

The Spirit is the One, the supreme Unity.

The Self is the three-in-one, the archetypal self-contained trinity.

The Dynamis is the nine-in-one, the archetypal trinity in the process of manifestation.

This ninefold dynamis is the substratum of the unending variation as well as ever-present oneness of existence. All possible self-relations—self-manifestations or aspects—of the Reality find place in the nine constellations of the trinity, One-All-Many, since this encompasses the absoluteness of the One and the plenitude of the All, complemented by the relativity of the Many. Since the Many comprise any number—and so any self-manifestation—between the original unity and the perfect totality, they add all finite and individual self-revelations to the infinity and transcendence of the All and the One. One and All are parameters, that is, arbitrary constants. The One is arbitrary, for it can stand for any unity; for instance, the supreme oneness of all existence, the unity of the terrestrial biosphere, the unity of mankind, the homogeneity of a chemical substance: thus for any individual universal and supracosmic oneness. It is a constant insofar as it always denotes the unity of the chosen field. The same holds true for the All, it always symbolizes the totality of a system, but that system can be determined freely. The Many, however, is a full variable; not only can one choose freely the domain of the Many (many forms of life, many types of human personality, many galaxies), but further, the number of the Many is also variable (e.g., five or twenty or X galaxies). Note that at its limits, the Many merges either in the One or in the All. Thus one galaxy denotes its unity as well as its Wholeness as a system, an All; or the four nucleotides of the DNA molecule constitute the totality of the DNA's nucleotides, and so an All.

The trinity One-All-Many gives us an extremely flexible structure and framework which can adapt itself to all elements, systems, dimensions and aspects of the Reality. Sri Aurobindo's revelation and teaching emphasizes that the complementarity of this trinity is needed for a complete and not merely a partial fulfilment of the cosmic play in the perfect self-symbolization of the supreme Reality, that is, the full self-realization of the symbol-existence.

Is such a triune condition of the soul possible? Logically [according to the rational surface-logic, which Aurologic attempts to transcend], it would seem impossible; logically, all trinities are chimeras and a thing must be one thing at a time and cannot combine three such divergent states as oneness [One] differentiated oneness [All] and effective duality [Many]. But in these matters an inch of experience goes further than a yard of logic, and experience, you will find, affirms that the triune God-state is perfectly possible and simple once you have attained God's fullness. We must not apply to the soul a logic which is based on the peculiarities of matter.¹⁴

If a truth-logic is to be formulated not only in essence and vast outline but so as to be

14. *Ibid.*, p. 59.

practically applicable, it must thus embody the Reality's triune state of being in its ninefold play of becoming and self-actualization. The following elaboration will show how Aurologic attempts to incarnate this ninefold dynamis in the fundamental processes or movements of logic. These constitute the global and essential framework in which all mental abilities, states and movements find their place— either as subordinate to one of the nine basic processes or as a combination, specific constellation, fusion and elaboration of various aurological movements.

Integrity, transparency, creativity, the initial operations of truth-thinking, are further developed in Aurologic. These three movements are the essence whose potential is activated and embodied in the nine logical processes. On this threefold foundation of truth-thinking is consequently built the superstructure which manifests if fully, materializing the subtle inner being, so to say, in a concrete body which functions as a practical instrumentation in all domains of awareness, thought, knowledge and their expression and manifestation. We have already mentioned the correspondence between integrity and the Vast, transparency and the Truth, creativity and the Right. Similarly, the One in its infinite and integral unity corresponds to the Vast and to integrity; to transparency and Truth of essence is related the differentiated, essential oneness of the All; the Many are naturally linked to the manifold action and play of the Right, of creativity. Thus we have an original idea in three aspects —Spirit, Self, Nature—each of which develops again triply. The resultant manifold network exhausts all possible relations between these three aspects, between the absolute and supreme, the essence and being, and the dynamis and becoming:

One	Vast	Integrity
All	Truth	Transparency
Many	Right	Creativity

One, All, Many symbolises the absolute trinity which is involved in the other two columns, in the second statically and in the third dynamically. The One stands for the supreme absolute, the All for absolute being, and the Many for absolute becoming.

Vast, Truth, Right designates the essential reality; the Vast is the essential absolute, the Truth the essential being, and the Right the essential becoming.

Integrity, Transparency, Creativity represents the dynamis, the motion, the play, where Integrity constitutes the dynamic absolute, Transparency the dynamic essence, and Creativity the dynamic becoming.

Equally, instead of following the vertical columns of the network, we can read it horizontally and establish the corresponding relations, e.g., One-Vast-Integrity denoting the three aspects of the absolute: the supreme, the essential, and the dynamic absolute. As Chart 3 shows, each of these vertical triplicities unfolds into its three corresponding constellations of the nine aurological processes (One-in-One, One-in-All, etc.). These in turn are the absolute, the spirit-reality that manifests itself in the duality subordinate to each of the nine aurological movements. This duality is the same static and dynamic duality we have just dealt with, the archetypal two-in-one: Self and Nature, Being and Becoming, Stability and

Movement, Purusha and Prakriti. The terms on the left side (all ending with "y") of the Aurologic chart (Chart 3) are evidently the Purusha aspect, the being; while those on the right side (all ending with "ion") denote the becoming of Prakriti. The chart will be followed by a detailed treatment of each aurological movement in the subsequent two instalments of "Auroscience".

CHART 3

AUROLOGIC

One-Vast-Integrity

Identity	ONE-IN-ONE :	Union
Equality	ONE-IN-ALL :	Communion
Diversity-in-Equality	ONE-IN-MANY :	Vari-union

All-Truth-Transparency

Globality	ALL-IN-ALL :	Inclusion
Interdependency	ALL-IN-MANY :	Relation
Complementarity	ALL-IN-ONE :	Harmonization

Many-Right-Creativity

Liberty	MANY-IN-ONE :	Manifestation
Potency	MANY-IN-MANY :	Mutation
Transcendency	MANY-IN-ALL :	Volution

WHAT'S THE SECOND PROBLEM?

Irving F. Laucks

This question implies that the *first* is not yet solved. The first of course is how to get rid of another threat to the existence of the human race—a threat under which all mankind has been living and deteriorating since nuclear energy was adapted to the purpose of killing one's neighbors and destroying their property.

Why are we concerned with a second problem when the first is still not solved? Because the second becomes much greater when the first is solved. If there is no solution to the second maybe the human race might as well quickly commit suicide with the first, to avoid the more protracted distress inherent in the second.

The second problem is what are people to busy themselves with, people that are not needed to produce the necessities of life (including some luxuries and amusements,

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etc.)? These necessities are being increasingly produced by laborsaving devices. Therefore, for some time many nations have been learning the truth of the old saying, "Satan always finds something for idle hands to do."

About one quarter of full grown Americans are without jobs; and have nothing interesting to do except to engage in "mischief". If we succeed in eliminating war as a human institution, this fraction will be greatly increased by the millions of soldiers and those engaged in making weapons who will then lose their jobs.

The second problem first became evident in the depression of the 30s. It was solved by the Second World War. So what! All that we need is a Third World War to put us all back to work! A reasonable estimate of immediate casualties, mostly in the northern peoples, are about 50 percent, with the other 50 percent either wounded or slowly succumbing to the radioactivity of the atmosphere in another five years. It is apparent, therefore, that the second problem will not exist if the first is not solved.

Let us assume, however, that the leading nations of the world are able to regain their common sense before civilization is destroyed. Then the second problem will become foremost.

The fact that there is a very definite possibility of two very bad courses for the present "civilization" seems to be evidence that these courses began when materialism had its be-

ginning with Copernicus, Galileo, Kepler and Newton, about three or four hundred years ago. These "scientists" started the real and intensive study of matter, and in a few centuries its results for all humanity became so attractive that the foremost portion of the nation became imbued with the idea that matter is the whole of the universe; this is the meaning herein of materialism in this article.

Before this, since recorded history began, most enduring religions have taught that this Earth life was only the beginning of existence, that there was some sort of paradise (or hell) in which mental or energetic existence continued. It is not surprising that such a decided change in the expectation of human existence would lead to great results. As an example, suppose a boy or girl of twenty were to become imbued with the idea that their end would come at twenty-one. This is somewhat comparable to what has happened to humanity in the last few centuries.

Nonmateriality has been held responsible for universe existence by most of man's religions since before history began. But there was no real study of its truth and so it is foundering before the reality of material science or materialism. We shall see, however, that science had to depend right from the start on nonmaterial forces, called energies, to explain much of the observed behavior of matter, and that these forces remain a mystery to this day. Energy's only definition is the power to overcome resistance, to accomplish, to do work. Today, energy is proving its importance very decidedly to man's practical world. This practical importance may even be the means of leading science to concentrate on further study on energy's real character. It might lead to showing that an energy was the basic essence of the universe, both nonmaterial and material. Let the reader try to

imagine what the Earth would be like without the kinetic energy of revolution, both daily and yearly about the sun. This is one of the energies that man tends to take for granted. So he did with electricity for ages until science began to study it—only a century or so ago. Can anyone affirm that psychic energy has undreamed of possibilities?

There are a number of other energies that associate with matter which are recognized by materialism, such as: kinetic (motion), heat, electricity, chemical, atomic, and nuclear. But perhaps the most important to humanity, psychic energy, materialism dare not recognize, although psychic energy, the energy of the mind, entirely conforms to the above definition. Herein we will endeavor to show that it is the original and most important energy of the universe.

Since most of the world's religions have taught something similar to nonmaterialism, and since they still have the best contact with the average human, they should welcome scientific corroboration of their teachings that gods, mostly nonmaterial beings with mentalities, were the fabricators of the material universe. These ideas are far older than recorded history, and their age entitles them to respect.

What else does materialism have to ignore in order to maintain its monopoly?

We have seen that the first denial of materialism was inherent in the concept of energy. Some forces possessed power over matter which certainly were not composed of matter. They made it perform in various ways: set it in motion, made it hot or cold, charged with electricity, made particles stick together, etc. They were all called energies. Science has only a loose definition of these energies signifying its ignorance of their character. Energies do work, overcome resistance, ac-

comply. If it were not for these energies this would be a completely dead world.

It is now time to specify the energy which keeps the universe *alive*; this is the psychic energy of the mind, principally in the species homo on this Earth. It conforms to all the previous definitions, but we shall note distinguishing differences just as there are in all the energies heretofore cited. Also, there is evidence that psychic energy may have been the start of the whole great universe (this is the Cosmology of Hope). Thus, psychic energy or some force like it takes the place of the various gods of religion.

Not like the gods of religion and mythology has it been an omni-wise and powerful organized structure as religions have postulated, nor a force ready to explode in one grand boom to result in the many possibilities of matter—like some materialistic cosmologies. Human experience entitles us to say that all knowledge grew from minute beginnings to at least much greater knowledge than exists on Earth today. The Cosmology of Hope refrains from attempting to stipulate the original source of the unorganized universe of possibilities; but it does say that this universe could be the source of all that exists today—if it had a few accidental "specks" of something like psychic energy present in all the unorganized primitive "protoplasm", both organic and inorganic. Human experience has been that all organized divisions of knowledge as well as matter have grown in that gradual manner ever since records began. The expansion since then has been tremendous and shows no sign of stopping, even though excess of materialism has driven some people to think that we have exceeded our possibilities to make discoveries. New ideas have always been slow of acceptance; man has generally had the false idea that he knows all

there is to be known.

About 1900 two scientists announced some new ideas about energy. Albert Einstein propounded a mathematical equation which said that matter was only another form of energy, and specified the relation between them:

$$E=mc^2 \text{ or } m=\frac{E}{c^2}.$$

Max Planck showed that some hitherto mathematical difficulties could be avoided by treating energy as composed of more minute particles than any previously known. These were called quanta. We shall see that quanta may be the most minute of the particle stages (molecules and atoms) of matter.

These two discoveries by the middle of the century had led to the development of the bomb of Hiroshima. Hence, we can say that they have a very considerable reality, even though not material.

Even before Einstein showed that matter was closely related to energy, a number of English scientists had determined that many tales about mysterious powers possessed by certain people (sometimes called witches) must be scientifically investigated. Thus began the Society for Psychical Research (SPR) in London, followed shortly by the American Society for Psychical Research (ASPR) and others in several nations of Europe.

In the century since founding the SPR, these societies have been responsible for a tremendous amount of evidence refuting materialism's claim that matter only makes the universe. It is impossible in a short article to go into any detail on the work of psychic research. Hundreds of books record these multitude of experiments. Many magazines are published on the subject. The writer was a technologies-scientist until 1942 when he disposed of a worldwide industrial company

and had time to see what else was interesting. He soon discovered psychic energy, which presented quite a new and interesting picture of the universe and quite eliminated any materialistic ideas he may have previously acquired.

With reference to our title question, we shall only mention a few of these topics:

1. The ability of certain human minds to affect and control matter and material objects to give the same results as other energies accomplish. History and religion have recorded such "miracles" of various people, perhaps the chief of whom is Jesus Christ.

2. Evidence that the mental structure of a human can exist, travel and perform, entirely unaccompanied by the material body. Such phenomena have been shortened to OOBes or OBEs (out of the body experiences). They demonstrate the mind as quite able to perform entirely free from the material body. It should be noted here that the energy of thought has not the slightest limitation by space. Thought can be directed by anyone to the farthest reaches of infinite space in the same time as required to reach your next door neighbor. This differentiates psychic energy from all others. It would of course be a necessity for a basic energy of the universe.

3. Direct evidence that the human mentality survives and is active after death of the material body. Such evidence comes from various sources including ghosts and communications through "mediums".

These are only a few of the topics concerning which psychic research has found much evidence. Much of this has resulted from experiments. This evidence confirms the basis of most of man's religions besides establishing the new religion of spiritualism. It confirms Einstein's famous equation that says that energy and matter are closely re-

lated, an equation that led to the bomb of Hiroshima. It confirms the experiences of a considerable portion of humans (by poll). It has started the new science of parapsychology. It should also be noted that medical doctors have recently decided that many supposed material ills of mankind exist only in the mind. These are called psychosomatic.

Materialism, on the other hand, like all other negatives, has no positive evidence whatever to uphold its dogma that there is nothing in the universe but matter. Only one experiment or experience well-confirmed will overthrow its mass of surmises.

It may seem to the reader that we have cited sufficient evidence to show that matter is only one portion of the universe. We must realize that many of man's important ideas of the "universe" were formed before the telescope was invented and man only then began to realize that this small Earth was but a minute part of the whole.

The latest evidence contradicting materialism (if any further is needed) comes from the search for still greater nuclear energy for war and destructive purposes. Could it be called a great joke if instead it turned out to be the start of the final proof that war was only a crazy idea of materialism?

After nuclear energy was discovered, our military research began to dig deeper into the structure of atoms in the hope of finding greater and greater energies for bombs. They have now penetrated to an interior stage of the atom which they call "strange", and have distinguished ten or more degrees of this strangeness. Since these all come out of matter we may assume that they are strange as compared to the usual properties of matter. They of course would therefore have to be similar to energy (or mind, as man used to call the universe—mind or matter). The scientists

then began to study these various degrees of strangeness in their search for the most potent. The first of these to be named was called "charm".

Charm as ordinarily known is a mental character—mostly belonging to women, in fact it has been largely responsible for the attraction of man to woman and thus for the multiplication of the human species. If now we can assume that it has been found in the innermost regions of the atom, it becomes very positive evidence against materialism, confirming along with religion, Einstein, psychic research, parapsychology and psychic energy, a new cosmology which we've called the Cosmology of Hope. This says that psychic energy was the source of the matter of the universe.

Lately cosmologies have been materialistic, but the Cosmology of Hope is nonmaterialistic. Since it could have a decided part in solving the "second problem" of the title, I will include a short account of it.

Somehow psychic energy commenced before anything else, and had a long evolution that finally produced minds somewhat similar to individual minds which we are familiar with. Just as minds require today, they soon become organized; they selected a leader (like Christian angels electing God).

These minds grew from small beginnings to have numerous characters, many of which are still unknown to earthman. Some of the "angels" became very curious about their energy surroundings just as scientists are curious today. Somehow these angel scientists found out how to turn energy into matter—the trick that we are trying to reverse today; this was the start of the evolution of the material universe. Some kinds of this matter retained a special kind of psychic energy inherent in carbon, hydrogen, oxygen and

nitrogen, the elements of life which evolved into life, and finally, on Earth and lately to man. Thus, man is composed of matter and a portion of mind. Other kinds of matter became the rocks for man to stand on.

The invention of matter was only one incident in the evolution of psychic energy. The first or main evolution has continued ever since. When a human dies his mental energy is free to join the main evolution, in the capacity appropriate to his previous earthly development. There is also evidence in reincarnation that some minds return to Earth life repeatedly before being admitted to the main evolution.

What connection can all of this cosmology have with our title question?

1. First it pictures the universe as rising from small or crude beginnings, instead of from an all-wise Creator as religion would have it, or from some great explosion as some materialist cosmologies have said. Since gradual beginnings are the ordinary and common methods of starting things and are familiar to all humans from the conception of their offspring to the start of a great organization or structure or even a nation, such a process must be the result of planning. Since matter has never shown any such capability, it must be mind, or psychic energy, which has shown such capability.

2. Since science agrees that all energy is indestructible there is no reason why the mental energy portion of a human should not return to the original main organization after death has destroyed its matter portion. Especially since the mind portion has demonstrated much ability to travel free from its material body during life.

3. Such confidence or hope in a future will cause a considerable and highly necessary change in the character of human existence.

The man or leader with the unquenchable ambition to succeed will realize that he has plenty of time to prospect the infinity of universe possibilities, and need not trample on any of his sojourners as he must on Earth. This latter tendency is responsible for most of the troubles which now plague the Earth.

Since this cosmology conforms in all

respects to man's experience, as shown by nearly a million years of records of geological and historical events, and since most earthmen are badly in need of a different prospect of both future and present, it might be worth trying the Cosmology of Hope for a few centuries, as the solution of the "second problem", but only after the first is solved.

REVIEW

Knowledge and Politics, by Roberto Mangabiera Unger. New York: The Free Press, 1975. 336 pages, \$12.95.

Liberalism is the name given to certain patterns of thought that have arisen mainly in the West during the past three hundred years. These patterns favor experimental science over the authority of revealed religion, elevate the autonomy of individual persons over the authority of the cultural community, and give priority to economic considerations over political considerations. Liberalism is not synonymous with but is closely identified with capitalism, which depends on experimental science for new technology and reinforces the assumption that economic growth is superior to almost all other values. The early belief in a free-market economy that would maximize individual choice was always largely a belief in a fictional entity. Today such beliefs are further confused by the existence of transnational corporations, welfare-states run in the name of free individuals, socialist states that behave like capitalist states, and the apparently universal appeal of economic growth and "liberation".

The admitted benefits from liberal institutions in protecting individuals from arbitrary and repressive authorities has been matched by certain disadvantages born of the liberal idolization of modern technology. These disadvantages include the upsetting of the balance of nature, the disproportionate consumption of nonrenewable resources such as fossil fuels, and the dehumanized treatment of persons by large-scale bureaucracies. The voices of both Marxist and non-Marxist critics of liberalism have increased in volume in recent years, but Roberto Mangabiera Unger, a brilliant young Brazilian who teaches in the United States at the Harvard Law School, is almost unique in the systematic way he subjects the *ideas* implicit in liberalism to philosophic analysis. Although he began his studies in legal theory, he was led into epistemology, psychology, social science, ethics and religion. The range of learning represented in these pages is impressive. His aim is audacious in its scope, yet his style is modest, compact, rigorously systematic and almost pedantic in tone except for wise aperçus that break through from time to time.

Unger boldly states that liberal psychology has accepted a false antinomy between reason and desire in the moral life, and that liberal political theory has accepted a false antinomy between public and private ends. These false antinomies are tied together in such a way that public values are taken to be but "the social face of desire". The failure to pen-

erate to the depths of the relationship between these two beliefs has, he thinks, vitiated the criticisms of liberalism coming from such diverse sources as Karl Marx and from European sociologists like Emile Durkheim and Max Weber.

The dualisms of liberal thought have created, argues Unger, a mode of separation between the self and the world reflected in the political ideal of individual autonomy, the religious ideal of transcendence, and, in metaphysics, the contrast between the universal and the particular. Trying to exist as a self in such a condition of division, one is rescued both from "the opacity of the world" and one's own "weightlessness in society" only by a retreat with friends into a private, subjective world. To overcome these dualities requires more than thought. It requires the transformation of societies in ways that cannot be fully anticipated. Though almost Thomistic in the structured quality of his thought, Unger is very Hegelian in his yielding to the dynamic elements in history and in his heroic search for concrete universals.

The clue to such transformations, Unger thinks, rests with what he calls "organic groups", groups that can overcome the divisions of role and class while maintaining a necessary division of labor and avoiding authoritarian domination. Hierarchy is necessary. The issue is whether hierarchy can be a consequence of democratic political choice or must be taken, as it is now, as a "technological given". The organic group should be an instrument for combining the "standard of merit" with the "standard of need". The welfare-corporate state and other forms of the modern nation-state cannot fulfill the requirements of such organic groups, although some state must exist to try to coordinate clashing communities.

Although there are occasional references to non-Western thought, Unger is clearly working within the framework of the Western philosophic tradition. Nevertheless, his quest for the universal and for emerging patterns of organic unity reaches out beyond any one culture. His whole work is an illustration of his concluding generalization: "Philosophy is a territory bounded on one side by politics and on the other side by religion." His last section is entitled simply "God". Unger is a philosopher in the classic sense. His yearning to be in touch with the particularities of politics, which is the business of everyday living, is matched by his yearning to hear the as yet unheard voice of God.

Lee C. McDonald

Lee C. McDonald is a professor of government at Pomona College, Claremont, California. He has just completed a year's sabbatical after having served as dean of Pomona for the previous five years. Author of Modern Political Theory, an article on political philosophy for the new edition of the Encyclopedia Americana, and a number of journal articles, he is presently finishing a second book.

FOCUS

PANDIT IN SINGAPORE

M. P. Pandit, the chairman of World Union International, editor of this journal, and a secretary of the Sri Aurobindo Ashram, recently visited Singapore at the invitation of the Sri Aurobindo Society there. He offered a series of lectures on various aspects of the teaching, philosophy and work of Sri Aurobindo and the Mother during a ten-day stay. With the exception of a brief time in Madras for a special function two months earlier, this trip marked Sri Pandit's first time out of the ashram in twenty-seven years. In addition to the central purpose of the visit, he reports that it also afforded an opportunity to observe the material affluence, charm, efficiency, cleanliness, openness, and civic consciousness of the cosmopolitan centre that is Singapore—itsself a meeting ground of East and West.

Daily meetings were organised by his hosts at various cultural and educational institutions, and discussions in small groups were also arranged. His extemporaneous talks on announced themes were invariably followed by open question and answer sessions. By all accounts, Sri Pandit's clear and embracing presentations, and his approach which sought to de-mystify matters yogic and occult, were enthusiastically appreciated.

At a press conference held the morning after his arrival, he spoke of World Union and emphasised that it is through the development of human consciousness that personal and collective integration is truly possible. He mentioned World Union's 1977 international conference, The Next Future, as an occasion when some of those working in a common direction will meet to apprise such developments in all fields of thought and life, and to affirm and concretise their connections. He also spoke at some length of Auroville as an experiment for the working out of a new pattern of existence based on a new, a unitive consciousness. As was the case throughout his stay, he was asked many questions on the practical application of yoga to political, social, and daily life.

The first talk was given at the annual general meeting of the Singapore Sri Aurobindo Society. Speaking on "Sri Aurobindo, the Mother and the Next Future" he explained that the demand on man in the emerging future is to enlarge and universalise his consciousness—a natural consequence of which would be a growing union of the world. The meeting had begun with a song of invocation by his colleague and secretary, Srimati Vasanti, who accompanied him to Singapore; upon request, she also gave informal recitals at several of the other functions during their stay.

The next morning Sri Pandit met with a group of spiritual aspirants and discussed the sadhana of Sri Aurobindo's yoga. At a reception in the evening, he was asked to speak on

the practice of meditation; the discussion was followed by renderings of the Rabindra Sangit by Vasanti.

On the third day there was an informal luncheon with prominent citizens of Singapore. The discussion ranged over a number of topics, from the necessity and means of culturing one's consciousness, to the rationale behind occult phenomena, to the future of society. His observation that the age of politicians is ending and that future leadership will be based on love evoked interested and hopeful responses particularly from those involved in political life. That evening at the Ramakrishna Mission Hall the theme was "All Life is Yoga". Sri Pandit first traced the lines on which the various traditions of yoga had developed. He then noted that they had generally led to an at least eventual renunciation of life but that the Time-Spirit was now demanding that yoga embrace the whole of life. The integral approach and contribution of the yoga of Sri Aurobindo and the Mother was considered in this connection. Again Vasanti offered several songs, this time Bengali devotional hymns, at the expressed request of the senior swami of the math.

The following day at the University of Singapore he spoke on "Sri Aurobindo's Contribution to the Ideal of Human Unity". The head of the department of political science there first gave a brief account of Sri Aurobindo's life in his introductory remarks. Sri Pandit then traced the political thought and activity of Sri Aurobindo from his youth in England to his arrival in Pondicherry, and his subsequent work in the light of the ideal of divine life. A rapid survey of Sri Aurobindo's evolutionary and spiritual interpretation of history was presented. He concluded with Sri Aurobindo's visualisation of the nations coming together in a finely balanced federal formation which assures diversity in unity. Positively provocative questions followed the lecture, and Sri Pandit was asked here to comment in detail on the concept and development of Auroville as a community trying to exemplify the possibilities of a life of human unity.

The evening meeting on the fifth day was held under the auspices of the Society of Singapore Writers. The theme, "Sri Aurobindo on the Adventure of Consciousness", employed the suggestive phrase from *Savitri*, and the occasion was utilised to present Sri Aurobindo's classic treatment to the questions of the why and how of creation. Sri Pandit explained how the fourfold soul-power in manifestation functions in the descent as well as the ascent of consciousness, and spoke of the adventure of consciousness to which man is now called.

Originally the next day was to have seen their departure but, having agreed to a request to extend the stay an additional three days, an informal gathering was arranged at which Singapore's professional community was represented and the Indian High Commissioner was present. Sri Pandit spoke briefly on Mother's approach to education, and thereafter Vasanti sang Sanskrit, Hindi, Marathi, and Bengali songs.

The largest audience came the next day for a talk on life after death at the Sri Aurobindo Society centre. Members of the centre also requested that Sri Pandit inaugurate their weekly meditation sessions the next evening and thereafter introduce and explain *Savitri*, Sri Aurobindo's epic. He spent ninety minutes giving a detailed overview of the legend, the progression of the poem, and its spiritual symbolism and message. Many present said they felt the work approachable and understandable for the first time.

The final presentation, on the morning of their last day, was at the Singapore Academy of Education. Sri Pandit introduced Mother's ideas on education and the experiments being made in the ashram and Auroville. Numerous questions were asked on the general application of these principles of education to other situations and communities.

It is clear that on each of the occasions throughout his stay in Singapore, Sri Pandit was met with not only active interest and respect but with appreciation and warmth. Mutually enriching new contacts have been made, established ones strengthened, and future possibilities opened.

THE NEXT FUTURE

Progress Announcement—II

Following the June "Focus", there are further developments regarding World Union's January triennial conference, The Next Future. Aspects are: expected evening events; additional acceptances to seminar invitations; preparations of the convening group; and a reminder.

Evening Events

Two anticipated seminar participants from California, Robert Bainbridge and Milana de Beauvoir Mascarenhas, are planning to contribute a one hour presentation titled, "An Adventure of Consciousness". It is a sophisticated multimedia programme etching the evolution of earthly consciousness from its beginnings to the future envisioned by figures such as Pierre Teilhard de Chardin and Sri Aurobindo. Peter Caddy, co-founder of the Findhorn community in Scotland, will share the experience of Findhorn by offering an audiovisual showing of the community's many-sided development and accomplishments. Arrangements are being explored for an Auroville venue of the Findhorn showing also.

New Acceptances

The following persons are planning, either certainly or tentatively, to be here for the seminar. They are in addition to those listed in the June "Focus" progress report.

Peter Caddy—Forres, Scotland: founder-director, the Findhorn Foundation.

Nitish R. De—New Delhi, India: dean, National Labour Institute.

Dr. Sitaram Jayaswal—Lucknow, India: reader in education, Lucknow University.

A. N. Rajaram—Pondicherry, India: manager, State Bank of India, Pondicherry Branch.

Robert Swann—Ashby, Massachusetts, U.S.A.: director, International Independence Institute.

Dr. William Irwin Thompson—Southampton, New York, U.S.A.: founder, and chairman, board of directors, The Lindisfarne Association; cultural historian.

F. Lawrsen Vig—Fyn, Denmark: Hesbjerg Peace Research College.

Findhorn and Lindisfarne are both emerging planetary communities which are attempting

to work out a new basis and pattern of life. They are similar to Auroville in several respects, and the three are often linked by current thinkers and writers.

Responses to other seminar invitations are expected soon and will be announced accordingly.

Convening Preparations

On 1 August the conveners called the first meeting of what is to be a core study-group consisting of about ten persons drawn locally from Pondicherry, the Sri Aurobindo Ashram, and Auroville. The intent of this group is to develop itself in preparation for hosting the seminar and plenary sessions of the conference. Regular and frequent discussion, reading and study, and effort toward a group consciousness through meeting and working collectively are the means it will use at the outset. Many of the books and journals selected for its working library are, incidentally, authored and edited by expected seminar members, and so will also be a means of acquaintance with participants' thought, vision, and expression.

Reminder

Those planning to attend the conference as general delegates who have not yet registered are reminded to write The Next Future, World Union International, Pondicherry 605002, enclosing the registration fee of Rs. 25 or its equivalent. This should be done now so it will be received before 1 October 1976, thereby assuring guest accommodations.

ORGANISATIONAL ACTIVITY

World Union Centres

Bombay In a multi-sponsored meeting with the Blavatsky Lodge of the Theosophical Society, the Friends of Yoga Society, and the Spiritual Unity of Nations, the Bombay Centre held a symposium on June 25th entitled, Self-unfoldment in the Light of Theosophy, Yoga and Spirituality. First Mrs. Todiwala of the Theosophical Society spoke about the development process of Patanjali's yoga in relation to theosophy. She was followed with an exposition on Zend-Avesta and yoga by Sri Dastur. Finally, World Union's Sri Amin described the integral unfoldment process, on several planes of consciousness, in the yoga of Sri Aurobindo.

Actually, this is the second time some of these spiritual movements collaborated in organising a gathering. The first, in April, brought a series of four lectures by Sri Rohit Metha on Sri Aurobindo's *Savitri: A Legend and a Symbol* and the problem of death, and another three lectures on the Integral Yoga. The Theosophical Society, Sri Aurobindo Society and World Union were pleased to see about three hundred persons attend their sponsored series of lectures.

Chakradharpur On 14 July Dr. P. R. Chandra was unanimously elected chairman of the centre. The election was occasioned by the transfer of his predecessor from the town.

India Centre The Scope of National Integration was the title of a seminar held on 26 July which concluded that the basis of national unity is fourfold: spiritual development, health improvement, true education, and economic upliftment of the masses. With the president, Sri N. S. Govinda Rao, taking part in the discussion, the group went beyond contemplating

the achievement of Indian integration and considered the difficulties of maintaining it once reached. Centrifugal tendencies internally, and ideological and economic pressures externally, would all have to be successfully dealt with so that eventually world unity could involve the free, unique development of each nation.

The India Centre intends to convene such seminars at least as often as once a month, in which the diverse aspects of national integration will be explored.

Konnagar Establishing the umbilical relation between the world union vision of Sri Aurobindo and the Mother and the immediate work of national integration fell to the speaking capacities of Sri Samar Kumar Bose. He is reported to have convincingly accomplished this task at Konnagar Centre's meeting of July 24th.

Nanjangud Firmly seized by the problem of young educated persons who cannot find employment, members of the centre, during the 18 July meeting, decided to act. They are going to help this crucial group of unemployed persons by, in their words, "giving them advice and guidance and enlightening them on employment opportunities. We shall be recommending suitable candidates for jobs in the local industrial establishments. We shall also recommend deserving candidates for bank loans so that they might start some small industry." They continue with an appeal: "We shall be thankful to you if you will kindly inform us of job opportunities in Pondicherry or any other place for graduates. Some graduates here are prepared to go anywhere and take up employment in view of the desperate financial conditions."

North Calcutta In their 20 July meeting Sri Sujit Kumar Palit announced that the manifold activities and programmes of the centre were being more and more enthusiastically performed by its members. For example, the youth and students are now meeting every week, attracted and inspired by the discussions which are taking place. He also reported that the newly established monthly study circle, which concentrated on the subject, The Human Aspiration, in July, will gather again in August.

Pondicherry A new member co-opted by the centre's committee is Sri A. N. Rajaram, manager of the Pondicherry branch of the State Bank of India. In one of the renascent centre's first projects outside of the rather extraordinary preparations to observe World Union Day on August 20th, it has made an appeal for receiving books, magazines and picture post-cards of an educational nature, especially from overseas, which will be presented to a selected local school as part of an effort to widen students' consciousness. The committee requests such material be sent to: Mr. George Moses, 3 Vivekanda Nagar, Pondicherry 605005 India.

A report has been received of the first meeting of a new, related movement in Pondicherry, the Youth Literary and Cultural Group. It was formed on 29 July 1976 under the guidance of Mr. George Moses, the chairman of World Union Pondicherry Centre. Sri Arvind Devalla spoke on how to effectively encourage international understanding as he was sharing his traveling experiences in different parts of the world. In the discussion which followed, members decided to invite young overseas visitors to their homes and their functions as a means of cultural and global inter-movement. The elected coordinator is Mr. K. Danassou, and their second meeting is scheduled a week hence.

U. K. (England) The centre has sent a short paper written by Mr. J. I. Patel, chairman

of the centre, which compares two minds in some detail: the scientific mind and the spiritual mind. The major distinction perceived is the scientific mind's operation within boundaries as it studies the nature of matter, and the operation beyond boundaries of the spiritual mind, which regards beauty, love, joy and awareness wherever they manifest.

In describing some actions of the boundaryless mind, Mr. Patel says the "Spiritual mind will not spend its efforts in establishing a hippy commune or a square society because one is a precipitation of the other and both are bound equally to the non-dogma of liberalism and permissiveness, and the dogma of conformism and acquisitiveness". He concludes by asking for an integration of the true scientific and spiritual aspirations in order to make the creation of the world citizen possible.

Uttarpara A very unusual event, the triennial general meeting of Uttarpara Centre, was held on July 25, 1976. Their newly elected committee is: chairman: Sri S. K. Gupta; vice-chairman: Sri Niranjan Chakraborty; secretary: Sri Samar Basu (re-elected); assistant secretary and treasurer: Sri Panchkori Banerjee (re-elected). Seven other members were elected, among which are: medical service unit: Dr. Sadananda Bhattacharjee; women's wing: Shampa Bhattacharya; youth wing: Pradeep Panja.

During this meeting the secretary presented his report of the centre's activities since its inception three years ago this month. This extensive document gives a virtual history of the centre, chronicling the beginning of its youth wing, women's wing, Auroservice unit, its educational work which took the form of a group called Sri Aurobindo Siksha Samsad, and a medical service unit.

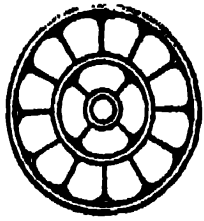
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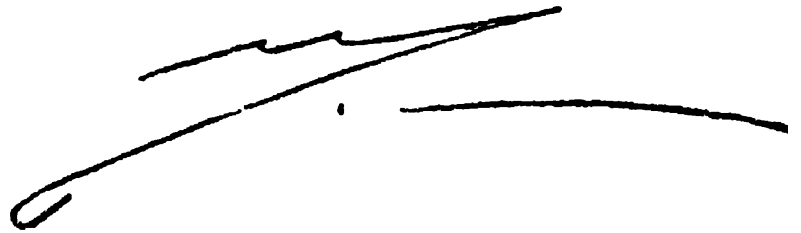
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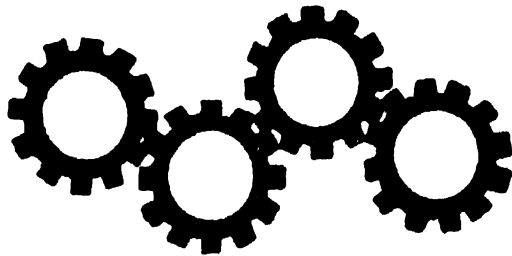
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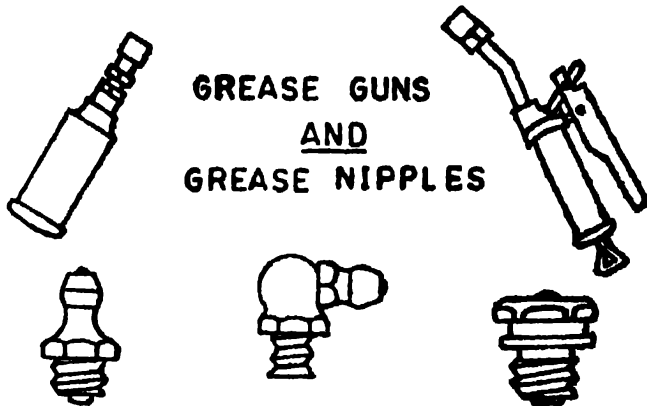
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EDITORIAL

Humility

Humility is a mark of culture. It develops naturally with the growth of the psychic or soul consciousness. Pride, arrogance, and insolence are products of egoism, which itself is a formation of ignorance. Those who want to outgrow their primitive ignorance and crude egoism, who aspire to embody a higher consciousness of truth and light, must necessarily eliminate the legacies of pride and the claim of superiority. These are truly vestiges of an animal past. The Time-Spirit is today insisting upon a clean break with past, egotistical modes of thought and life, and upon a conscious development of the human spirit in the direction of harmony and unity. Any kind of elitism or exclusivism is an anachronism. Any attitude that seeks to shut out others in order to sustain and promote one's own supposed superiority of consciousness is unspiritual, antiprogressive. Writing more than three decades ago on the position of gnostic communities vis-à-vis societies still functioning at lower levels of consciousness, Sri Aurobindo explained that there would be a free and meaningful interchange between them. There would be no great danger of the former being overwhelmed by lower elements, because their own gnostic consciousness would wield a natural self-protecting power. He did not envisage the functioning of gnostic communities in splendid isolation. If that were the case, such communities would be irrelevant to the progress of humanity. They would forfeit their right to help lead the rest towards the high goal that Nature has set before humanity as a whole.

Man the Measure

It is being said that our technological civilisation has grown too big for man to handle and that it therefore should be restrained, reduced to the measure of man. But that is not the way of Nature in evolution. The natural inclination is that of growth, progression. The solution is clearly not to confine the growth of technology but rather to enlarge the capacities of man, to extend his consciousness so as to contain and harmonise toward true growth the natural developments in the realm of execution. Man is a developing being and there is no limit to his growth—not indeed of his outer “body” but of his consciousness, which is what gives him true power over the whole of creation. Not to limit but to expand is the rule.

An allied question is whether smaller formations are not preferable to larger ones for achieving optimum progress. Experience shows that both are necessary. There are spheres of fulfilment where smaller unities assure maximum progress. There are areas where larger instruments, in keeping with environmental and intrinsic considerations, are a must to ensure maximum utilisation of opportunities and resources. A just balancing of both the approaches is the need of the hour.

The Next President

While it is true in a certain sense that in the modern world it is the system and not the individual that is paramount, still individuals with vision and faith can do a good deal to change systems when circumstances favour such a change. This opportunity seems to have arrived in the United States. Every indication is for a change. The people want it. The political and economic conditions call for a radical shift in approach. And the right man is on the scene—we mean Jimmy Carter. Clearly he is a person with great reserves; his eyes bespeak a power from a more than human source. Given the opportunity and assuming his sincerity, he can easily rise to be America's man of destiny during the next decade. Carter has a big part to play on the world stage.

M. P. P.

THE PRISTINE AND THE ARTIFACT: VALUES OF THE MANMADE MAN

Robert A. Smith III

The motive force and the basis of personal conduct working towards the ideal world must be an attitude of kindness and respect in relation to all other men regardless of race, color, class, occupation, creed, or anything else; we are of equal worth as human beings until we deliberately debase ourselves by ignoring our social responsibilities. The suffering of one is the suffering of all; evil is usually manmade and we must always aim at eliminating any lies within our range of action. After music, education is the most important thing in life, for it alone enables us to formulate and carry out our ideals.

Avraham Ben-Yosef

The Twentieth-Century ecologist would add that we ought to love the whole planet and treat it as though it were a vulnerable living organism, refraining scrupulously from all those outrages against nature which have turned so much of the once beautiful into excrement, industrial wastes and slums. Love is as necessary for human survival and growth as are bread on the physical and knowledge on the symbolic level. Buddhism, Christianity and modern science are in full agreement on this point. But how curious and how ironical that the only people to devise a method for conditioning children to love more warmly and widely should be a tiny group of savages in the wilds of New Guinea.

Aldous Huxley

Recently retired from his position as an operations planner and organisational behavior analyst with NASA in Huntsville, Robert A. Smith III continues as an adjunct associate professor at the University of Alabama's Graduate School of Administrative Science. He also presently serves on the steering committee of the Ad Hoc Committee for the Establishment of a U. S. Peace Academy, and on the editorial boards of several journals. Mr. Smith has contributed chapters to several books edited by others, and articles to a number of periodicals.

The ever-growing inability to exercise choice, I believe, is the crucial problem of our times. On the one hand, the fact that the advocates of a science free from value judgements, the purely descriptive science, have won out, at least temporarily, has meant that a younger generation, saddled with awesome choices, receives little help from our educational processes for making such choices. On the other hand, conflict of the individual with his broader society has been brought into sharp focus—glaring headlines, TV spectacles, best sellers and so on. The United States, traditionally based largely on individual values and personal freedom, now finds itself facing a paradox described in such terms as “participatory democracy”, “doing one’s thing”, “my rights”, all in the name of the “social good”. And yet beneath the glamor, we often find that the merchants of advertising, who developed a culture of consumption, have also developed selfishness, irresponsibility, and a disturbing form of selfish rudeness—an inability to listen long enough to give or to receive feedback. “Participatory democracy” does not become democratic participation—rather it becomes the mobocracy of direct action. “Doing one’s thing” is not that, but rather the womb complex of hiding in the group milieu—adolescents failing to emerge into adulthood.

These are actions largely growing out of an overly-affluent society which has failed to couple freedom with responsibility, democracy with democratic sportsmanship, peace without violence, and respect rather than the egocentric love and hate prejudices commonplace today. We have forgotten the lessons of Gordon Allport and other pioneers in human behavior who painstakingly made their discoveries available. Allport’s revelation about in-group esteem and out-group scorn being two sides of the same coin is constantly relevant.

Choice, or to choose between conflicting values, is an art which needs constant cultivation and the appreciation, individually and collectively, that this indeed is the case. A choice made, which fails to join freedom with the responsibility for the exercise of it, is a choice reflecting the narcissistic selfishness of the individual, the group, or the nation which made it. Choice cannot be made in the vacuum of narcissism without dire consequences; choice must be made in the framework of the human matrix—and that matrix which moves toward the global and promises soon to become planetary. Sir Geoffrey Vickers’ beautiful metaphor describes it. He maintains that “We are guardians of a social humus . . . guardians not merely of values but of the soil in which values grow.”¹ Dorothy Lee, the social anthropologist, provides a rational wording of Sir Geoffrey’s admonition: “We have to reconcile principles of conformity and individual initiative, group living and private freedom of choice, social regulation and personal autonomy.”² Credibility to these significant observations was amplified by Bonhoeffer. Magnificent in his lonely stand, he took up his gauntlet, faced the concentration camp and ultimately death at the hands of Hitler and the Third Reich. But, even in death, Bonhoeffer coupled responsibility with freedom and fused his personal autonomy with the suffering of the scapegoats of his day, the millions of German Jews.³ Bonhoeffer’s

1. Sir Geoffrey Vickers, *Value Systems and Social Process* (New York: Basic Books, 1968).

2. Dorothy Lee, *Freedom and Culture* (Englewood Cliffs, New Jersey: Prentice-Hall, 1959).

3. Ellul describes the type of raw courage exhibited by Bonhoeffer. Jacques Ellul, *Violence: Reflections from a Christian Perspective* (New York: Seabury Press, 1969).

lesson is one of giving rather than demanding—self responsibility rather than social blame—death that meant life rather than life that meant death. Maslow, Benedict, Bateson, Lee, Whorf and other anthropologists highlight this aspect of human value systems. In fact, Maslow's generous Blackfoot chief with his gift of horses, while losing his all, gained the respect of his tribe and, thus, in benefitting the tribe, he benefitted himself.⁴

Benedict's good or high synergy society is one in which both the individual and his society recognize their mutual need and act accordingly.⁵ The good society is a mark of high social achievement.

I think too of another current neglected aspect of life—the managing of disappointment, to paraphrase Abraham Zaleznik. Our stress on success and on the gratification of the immediate (felt or actual needs) has lessened our capacity to seek long-range goals or to recover from disappointment and, all too often, our response to disappointment closely resembles the temper tantrum of a spoiled child.

Growing up in a region closely identified with football, I am keenly aware of what managing disappointment can mean. I recall the frustrations that Bart Starr, quarterback for the Green Bay Packers professional football team, must have felt in a three-season losing streak at his alma mater. But Starr managed his disappointment and became a great competitor. There are many stories of this type in all the professions but they are not being told. As Alvin Gouldner informed his fellow sociologists, we do not have to be partisan to seek and find values.⁶

Milton Rokeach has given a meaning to values which I consider appropriate for the context of this paper. He states, "I consider a value to be a type of belief, centrally located within one's total belief system, about how one ought or ought not to behave, or about some end-state of existence worth or not worth attaining. Values are thus abstract ideals, positive or negative, not tied to any specific attitude, object or situation, representing a person's belief about ideal modes of conduct and ideal terminal goals—what Lovejoy (1950) calls generalized adjectival and terminal values."⁷ Rokeach maintains that "A *Value System* is a hierarchical organization—a rank ordering—of ideals or values in terms of importance."⁸

Now let me proceed directly to my topic—the pristine and the artifact. I believe that I can address myself to this topic because I have been an organic resident of both the country and the city. While identifying with Jefferson in his agrarian outlook, I feel equally comfortable with a Pat Moynihan or a Kenneth Clark. Ervin Laszlo, paraphrasing Albert Schweitzer,

4. Abraham H. Maslow, "Towards a Humanistic Biology", *Fields Within Fields* . . . *Within Fields* 3, no. 1 (1970).

5. Abraham H. Maslow, and Larry P. Gross, "Synergy in the Society and in the Individual", *Journal of Individual Psychology* 20 (November 1964).

6. Alvin W. Gouldner, "The Sociologist as Partisan: Sociology and the Welfare State", *American Sociologist* (1968, no. 3). Also, Kenneth B. Clark, "The Governance of Universities in the Cities of Man", *The American Scholar* (Autumn 1970).

7. Milton Rokeach, *Beliefs, Attitudes and Values* (San Francisco: Jossey-Bass, 1969).

8. *Ibid.*

calls for a reverence for natural systems. He expresses this reverence as "a reverence for our own kind, when our vision is wide enough to see ourselves not only in our children, family and compatriots, and not even in all human beings and all living things, but in all self-maintaining and self-evolving organizations brought forth on this good earth, and, if not perturbed by man, existing here in complex but supremely balanced hierarchical interdependencies".⁹ I second this call.

I recognize more and more that one cannot be thorough anti-urban in the vein of an Emerson, or a Thoreau; or anti-civilization in the vein of a Rousseau, a Henry Miller, or a Norman Brown. Neither can one be a complete utopian—such determinism would undermine delightful idiosyncracies of "characters" or cultures and actually eliminate the pleasures of anticipating probabilities. However, one can ill afford not to be Pascalian, and should remain polemic—touching first the one and then the other pole while busily engaged in filling in all the intervening space, and seeking organic or natural social relations. We must concern ourselves more and more, as the nineteenth century American novelist, Hawthorne, did in his *The New Adam and Eve*, with urban artificiality and urban terror. John Calhoun more recently has touched on this same theme in describing the similarity of breakdown in overcrowded pens of rats to the human behavioral sinks of the inner city.¹⁰

While, as the Whites maintain, "The Wilderness, the isolated farm, the plantation, the self-contained New England town, the detached neighborhood may [sic] be things of the American past", I would not necessarily agree that "All the world's a city now and there is no escaping urbanization, not even in outer space."¹¹ Although Mumford may speak of organic metaphysics and the Whites of total urbanization, I would suggest that we must familiarize ourselves with what I would term the ecology of general systems. Such ecology must concern itself with "Perception, on which Gestalt psychology centered its attention". Polanyi suggests that perception "now appears as the most impoverished form of tacit knowing".¹²

I fully agree with Polanyi, for I constantly confront the "immaculate perception" of specialists who see only their fragmented sterile version of life or process. They retain the virginity of their profession simply because they have never experienced the wonder of knowing what is beyond their pale.

Occasionally, throughout history, isolated individuals have come along who develop this gestalt perception—I think of Ludwig von Bertalanffy, John Platt, Buckminster Fuller, Julius Stulman, Abraham Maslow, Oliver Reiser, Michael Polanyi, Warren Bennis, John McHale, Reza Arasteh and Gene Youngblood. I also think of Goethe, Leibniz, Lao Tzu, Nicholas of Cuza, Bruno, Rumi, Pascal, Sri Aurobindo, Tagore, and to some extent Jefferson

9. Ervin Laszlo, "Reverence for Natural Systems", *Fields Within Fields . . . Within Fields* 3, no. 1 (1970).

10. John B. Calhoun, "A Glance into the Garden", Mills College Assembly Series (Oakland, California: Mills College, 1965).

11. Morton and Lucia White, *The Intellectual Versus the City* (New York: New American Library, 1961).

12. Michael Polanyi, *The Tacit Dimension* (New York: Doubleday, 1966).

and Emerson as well as Kenneth Boulding and Kurt Lewin.¹³ The ecology of general systems involves a pantheistic awareness—an awareness of the natural system of the city and the natural system of wilderness areas.

What we perceive as prehuman in nature is natural—in civilized man it is not natural—for rarely do species attempt to eliminate their own kind. There is a “tacit dimension” in nature perceived by the creatures inhabiting it. They operate in the eternity of time and “once more the mountains would be worn away by the endless erosion of water and carried in silt to the sea, and once more all the coast would be water again, and the places of its cities and towns would belong to the sea”.¹⁴ It is the sound of Claude Debussy’s lovely tone poem, “The Engulfed Cathedral”, where the ebbing and flowing of the tide mingles with the haunting sound of the cathedral’s bell, or of Bach’s inspiring and evolutionary spirals ever reaching for a cosmic omega. I feel that what we are facing is indifference in a culture which has promoted this. As John Platt says, “change the culture and you change the man”.¹⁵ Benedict, Mead, Maslow, Whorf, Lee and other cultural anthropologists have thoroughly demonstrated this fact. A Spartan brought up as a Spartan is a Spartan—a White brought up to hate Blacks, hates them—a Black brought up to hate Whitey, Pigs, and honkies hates them—an Arab brought up to hate Jews, hates them—but a citizen brought up to enjoy the world as a whole world and to respect his fellow world citizens will tend to do so, or, as a minimum to avoid the tragedy of stereotyping or of seeking some inferior scapegoat upon which to vent his own feelings of impotence. “What parents can and should do—what the school, college, and all educative instrumentalities of the community and of its particular culture (including religion of course) can and should do, is to act as psycho-social ‘matrices’ within which the child will be able to develop his feeling responses, his conscious mind and his character . . . so that he may act as fully as possible as an *individual person* conscious of his participation in the evolution of humanity.”¹⁶ In other words, to develop an awareness of a global whole, and global wholes and global interdependencies, is to contribute to our planetary progress—the failure to do so leads to possible human destruction and humanitarian erosion. Responsibility, therefore, is always judged within “a symbolic framework of values as accepted in a society under given circumstance”, for “*social science is the science of social systems*”.¹⁷

Marlowe’s and Goethe’s Faust was an individual soul selling himself to the devil. Anthony Weiner’s Faust is the collective Faust of the twentieth century; not totally immoral by choice but amoral through the failure to develop the art of choice. We face the collective Faust who has little respect for the world as he found it, even less for responsible dissent and innovative diversity, and who either fully imitates or in massive iconoclastic fashion

13. See, Lewis Mumford, *The Transformation of Man* (New York: Harper and Brothers, 1956).

14. Rachel Carson, *Under the Sea Wind* (New York: Oxford University Press, 1941).

15. John Rader Platt, *The Step to Man* (New York: John Wiley & Sons, 1966). Also, *Perception and Change: Projections for Survival* (Ann Arbor: University of Michigan Press, 1970).

16. Dane Rudhyar, “Basic Principles for a Reorientation of Education”, *Challenge* (Spring-Summer, 1970).

17. Ludwig von Bertalanffy, *General Systems Theory* (New York: George Braziller, 1968).

wishes to destroy the technical-rational structure. This means we must find a relevance for "perpetuating those institutions that protect freedom of human choice".¹⁸ For, "A person-centered society can never bind the future irrevocably."¹⁹ Or as Matson puts it, "When man is the subject, the proper understanding of science leads unmistakably to the science of understanding."²⁰

The belief that violence is justified on the grounds that "in forcing the system to a reexamination of its weaknesses and to a readjustment of its values, violence thereby performs a useful function which is therapeutic to the body politic" is invalid; for, similar to Alinsky sounding his reveille for radicals and forgetting to change the tune, "the zoo keeper" doesn't change his mentality: he is merely replaced by the inmate.²¹ Continued violence ceases to alert; it threatens and the threat brings about the tragedy of polar extremes—primitive but devoid of pristine beauty. Perhaps "what matters in our life's development is not that we reach a goal of perfection but that we expand our field of awareness as much as possible as we follow the path of our problems".²² This means to me that we should seek a "*more intuitive methodology for comprehending larger totalities, more inclusive wholes; ... [yet] from a humanistic viewpoint, the hoped-for unity of mankind should be based on the recognition of the value of cultural diversity, provided this diversity is maintained within an emerging framework of a universal ethics*".²³ Reza Arasteh states the case for us in these words, "social institutions must be reappraised and adapted to the qualities of integrated men, for indirectly such qualities will provide values and channels which assist children to grow without losing their totality".²⁴

Roger Wescott, the anthropological futurologist, borrowing from Irwin Sanders, identifies three cultural products styled as sociofacts, mentifacts, and artifacts. His identifications are: "Sociofacts are associations of persons; mentifacts are ideologies or symbol complexes; and artifacts are tools, edifices, and similar types of handiwork."²⁵ Wescott distinguishes between man and other animals by proclaiming that other animals have what is termed nature whereas man possesses unnature or a complex of unnatural behavior patterns; some of which are involved in his sociofacts, artifacts, and mentifacts.

Wescott, without drawing the full analogy, is informing us that man has an institutional process separate and apart from his biological instincts. Donald Michael puts the issue in sharp

18. Anthony J. Weiner, "Faustian Progress", in Richard Kostelanetz, ed., *Beyond Left and Right: Radical Thought for Our Times* (New York: William Morrow & Co., 1968).

19. Robin M. Williams Jr., "A Model of Society: The American Case", in Bertram M. Gross, ed., *A Great Society?* (New York: Basic Books, 1968).

20. Floyd W. Matson, *The Broken Image* (New York: George Braziller, 1964).

21. See, Lynne B. Iglitzin, "Violence and American Democracy", *The Journal of Social Issues* (Winter 1970).

22. Edward C. Whitmont, *The Symbolic Quest* (New York: G. P. Putman's Sons, 1969).

23. Oliver L. Reiser, *Cosmic Humanism* (Cambridge, Massachusetts: Schenkman, 1966).

24. A. Reza Arasteh, *Final Integration in the Adult Personality* (Leiden, The Netherlands: E. J. Brill, 1965).

25. Roger W. Wescott, *The Divine Animal: An Exploration of Human Potentiality* (New York: Funk and Wagnalls, 1969).

focus: "The institutional change process, and indeed the political and value change process that goes with it become all the more central."²⁶ Without changes in institutional value systems, all else peters into admirable gestures. The perceptual process often becomes crude overstatements of theory, leading institutions into sanctioning either the law of claw and fang, à la Jack London, or becoming machine-like in the control of men, making man himself become either the ape or the robot. Man can ill afford to maximize single variables or to specialize to the extent that he atrophies all his other qualities. The meek might inherit the earth not because of humility but because adaptability is enhanced by variability.²⁷

Suddenly, yea within the decade, all people of the globe are part of an electronically based, intercommunicating network, where the young share common experiences, which was not possible for the older generation. Gene Youngblood maintains that "a culture is dead when its myths have been exposed . . . television reveals the observed, the observer (and, more importantly), the process of observing". What we have is what Youngblood, with a pregnant neologism, calls the "Videosphere" —Teilhard's Noosphere of organized intelligence transformed into a perceivable state.²⁸ But, this also leads to some considerations which Toffler outlines for us: "As interdependency grows, smaller and smaller groups within society can [sic] achieve greater and greater power for critical disruption."²⁹ This again means reconciliation of the individual and the social dichotomy. Individuals must be exposed during their early development to "transcending their organic individuality with conscious participation". Hans Esser elaborates the fact that *man is becoming his environment*. Esser interestingly separates the functions of the social and the prosthetic capacities of the human brain. The social capacity is the behavioral capacity and the prosthetic capacity is that capacity which enables man to extend himself through his artifacts, mentifacts, and sociofacts. As Esser maintains, "For the purpose of cultural evolution, however, the human animal must be continually prepared to forget what his early childhood taught him, since our *prosthetic brain* relentlessly increases its complexity, and thereby forces us . . . to make new adaptations . . . the word *prosthetic* is used here deliberately to connote artificial addition."³⁰ The existing incompatibility of our social and prosthetic images is the source of social pollution and requires new looks at our diminishing imaging capacity and our social institutions. When we can blend the animal and the human images of the social and prosthetic brains, we will be in position to overcome social pollution. At least we can help our evolution by promoting an environment which results in the synergistic brain. *Synergistic imagery is required at this stage of human evolution to explore both inner and outer space*. We need to develop a willingness to participate in our social evolution. In this, our unity, through essential diversity,

26. Donald N. Michael, *The Unprepared Society* (New York: Basic Books, 1968).

27. Margaret Mead, *Culture and Commitment* (New York: Natural History Press, Doubleday, 1970).

28. Gene Youngblood, *The Videosphere*, unpublished 1970.

29. Alvin Toffler, *Future Shock* (New York: Random House, 1970).

30. Aristide H. Esser, "Social Pollution" *Social Education* 35, no. 1 (1971). See also, Raymond G. Studer, "Human Systems Design and the Management of Change". Paper presented to the Second International Conference on the Problems of Modernization in Asia and the Pacific, Honolulu, Hawaii, August 5-9, 1970.

will find itself through recognizing the normative contexts identified by Kluckhohn and Murray.³¹ Every man is in certain respects: (a) like all other men (universal norms); (b) like some men (group norms); (c) like no other men (idiosyncratic norms). The universal monad or "polymonad" recognizes these normative frames of reference. He also recognizes that evolution and involution, like syntropy and entropy, are correlative processes. Syntropy, as Bennett points out, is an up-grading tendency "whereby quality is enhanced in all departments of nature, including man himself".³²

Roy Grinker asks the profound questions "can mankind give up its reification of symbol systems which have a tendency to develop lives of their own?" and, "can we recognize that organism and the environment are parts of the same system which means that both man's thinking and the social forms of control developed by him are in the process of change?" He answers, "a living system is the whole complex of the organism and the environment".³³

After leading you through the labyrinth of comprehensive thinkers and social designers, I will attempt to give you the essence of the pristine and the artifact. There is an essence of life—an essence to be distilled from nature. The fire is the sunrise and the essence is the beholding—the sensing of the pulsations of a sentient universe—the sun, the galaxies, the green earth, the clear lake, and the clean city all tell of its timeless being. You will not find this essence in bottles hidden away on the musty shelves of a drugstore, nor in the bubbling retorts in multimillion dollar chemical laboratories. The essence is the omnipresent aura of living systems, recognizing both their symbiotic and morphogenic values.

As Cassirer's *animal symbolicum*, we also have obligations of merging our imaging capacity with our value systems so that we reflect the constant tao—the yang of action and the yin of gestation and meditation. While preserving the pristine beauty of natural systems, we must become increasingly aware of our rapid *artifactual* evolution and consciously assure that emergent characteristics of envisioned probabilistic goals replace the mechanistic characteristics of programmed determinism. This would enable us to develop an industrial humanism with a value system which would clean the air, beautify the cities, restore large areas to their pristine beauty, eliminate behavioral sinks, and establish a planetary society worthy of man—an overall stewardship of our planetary society.³⁴ As Rollo May challenges us, "If we are to study and understand man, we need a human model."³⁵ We need, in short, a value system which "offers itself as an emerging philosophy of synthesis, a social lens to

31. Clyde M. Kluckhohn, Henry A. Murray, and D. M. Schneider, eds., *Personality in Nature, Society, and Culture* (New York: Knopf, 1953).

32. J. G. Bennett, "Total Man: An Essay in the Systematics of Human Nature", *Systematics* 1, no. 4 (March 1964). See also, David A. Kolb and Richard E. Boyatzis, "On the Dynamics of the Helping Relationship", *The Journal of Applied Behavioral Science* 6, no. 3 (1970).

33. Roy R. Grinker Sr., "The Continuing Search for Meaning". Paper presented to the American Psychiatric Association, San Francisco, May 12, 1970.

34. John McHale, *The Ecological Context* (New York: George Braziller, 1970).

35. Rollo May, *Psychology and the Human Dilemma* (Princeton, New Jersey: van Nostrand, 1967).

focus and unify human vision, thus giving coherent form to [our] collective aspirations and purposes".³⁶

And where and how one might well ask, can we either find or develop such a model? It must develop from both a passionate interest in individuals' emotions and growth and a concomitant concern for community. In other words, to develop men who will not repeat "the tragedy of the commons". To me, this means that there is a need to reform both "the purpose and organizations of our institutions to enable them to adapt responsively in an exponentially changing social, cultural, political, and economic environment . . . on a human scale which permit[s] the individual to retain his identity and integrity in a society increasingly characterized by massive, urban, highly centralized governmental, educational, mass media and other institutions".³⁷ Stated differently, we must concentrate on overcoming misapplied Darwinism.³⁸

René Dubos says it in these words:

There is evident everywhere in nature a close correspondence between most of the structures and activities of living things and the needs imposed upon them by their places in nature. The necessary outcome of this relationship is a dynamic equilibrium which implies inseparability of life and environment, and which has fitness as a consequence.³⁹

When man fails to perceive the dynamic equilibrium between the pristine and the artifact, it is due in no small measure to the failure of the rational systems thinker to consider emergent phenomena—he is confounded by the second- and third-order consequences brought on by achieving a single-variable, primary goal and repeats "the tragedy of the commons". Knowledge can never be wholly impersonal without tragic results. As Marjorie Grene says, "This interpenetration of 'self' and 'world', can never be wholly impersonal."⁴⁰

The human model we propose must increasingly reflect an understanding of the essential symbiosis of the pristine and artifactual worlds. Truly, the world we live in today is much more of a manmade, or artificial world, than it is a natural world. Simon says:

While a forest may be a phenomenon of nature, a farm, including corn and cattle, have to be considered artifacts of man's ingenuity. . . . Those things we call artifacts are not apart from nature. . . . They are

36. Reiser, *Cosmic Humanism*.

37. Warren G. Bennis, "A Funny Thing Happened on the Way to the Future", *American Psychologist* 25, no. 7 (July 1970).

38. Roger W. Wescott, "Darwinism and Utopia", *The College Quarterly* (Fall 1961).

39. René Dubos, *Mirage of Health: Utopias, Progress, and Biological Change* (New York: Harper, 1959).

40. Marjorie Grene, *The Knower and the Known* (New York: Basic Books, 1966).

adapted to man's goals and purposes . . . [and] as man's aims change, so too do his artifacts—and vice versa, as well.⁴¹

In other words, "A man, viewed as a behaving system is quite simple. The apparent complexity of his behavior *over time* is largely a reflection of the complexity of the environment in which he finds himself."⁴²

However, the capacity of the digital computer to simulate man's behavior and his environment (Bucky Fuller's World Game) has enabled us to extend the range of systems whose behavior can be simulated. But, and this is important, only *experiencing* enables us to discover the effect of unprogrammed emergent characteristics. Simon elaborates: "For if it is the organization of components, and not their physical properties, that largely determines behavior, and if computers are organized somewhat in the image of man, then the computer becomes an obvious device for exploring the consequences of alternative organizational assumptions of human behavior."⁴³

Really what Simon is saying and what Bucky Fuller is demonstrating is that computer simulation helps us in dealing with possible worlds—similar, for example, to astronauts dealing with both simulated space flight and lunar landings prior to the actual events taking place. But even here, we can only go so far in simulating a closed-system macro environment of a spaceship earth through the closed-system micro environment of a spacecraft. However, our artifactual evolution is being extended rather rapidly through the cyborg technique (cybernetic organism) through such devices as heart pacers, aqua lungs, space suits, etc. This technique will enable man to retain his biological or natural system heredity while becoming even more manmade and more adaptable to alien environments.⁴⁴

That there are real dangers inherent in computer simulation is becoming well known. The Manichean methodology of national military establishments, and, to some extent, religions, have illegitimately polarized people into the good and bad camps, yet man, as someone said, remains his own measure. Boguslaw succinctly states the case: "Truth and efficiency are highly effective as instrumental heuristics. But as value heuristics they ignore the prejudices some of us have about the distinctive importance of human beings."⁴⁵ To me this recalls the admonitions of Thorsten Veblen and C. Wright Mills that we constantly must break the bonds of new customs, prescriptions, precedents by developing value systems in our social criticism, or history will record the triumph of new imbecile institutions, rather than the creation of a truly global public consciousness that the whole earth is part of the "commons". It is this global consciousness which will indicate to the individual to involve himself in the

41. Herbert A. Simon, *The Sciences of the Artificial* (Boston: MIT Press, 1969).

42. *Ibid.*

43. *Ibid.*

44. Mitchell R. Sharpe, *Living in Space* (New York: Doubleday, 1970).

45. Robert Boguslaw, *The New Utopians* (Englewood Cliffs, N.J.: Prentice-Hall, 1965).

global issues of his day—as both a creator and participant in his society.⁴⁶ With this in mind, cybernetic information technology enables us to create “new possibilities effectively to implement . . . redefinitions of traditional value systems”.⁴⁷

The human model will recognize that “The sense of being at home depends neither on size, nor on traditional form, but on an active relation between men and their landscape, a landscape which they make [sic] and which speaks to them.”⁴⁸ Paraphrasing Archibald McLeish, we need a new global humanism which will bring this about—a global humanism which will free us from the paralysis of the soul brought on by the anarchy, conformity, and narcissistic selfishness of a materialistic culture. In short, we must assure that “global humanism grows [sic] out of global education”.⁴⁹ From the ecosystem point of view, our human model must understand the myriad ways in which “Man’s activities depend upon environmental variables—variables such as size, density, temperature, noise, configuration, proximity, color, and many more.”⁵⁰ We can readily see how important it is to know man in relation to these myriad variables, or, better put, man in his gestalt of life. This ecosystem is the ground of being for human values where creativity is the encounter of the intensely conscious human being with his world.

Considering the ecosystem with its myriad of variables, it becomes imperative to recognize that “The interrelationships of peoples and their problems, of social issues and their solutions, are so complex that single-to-single, fact-upon-fact, disciplinary-isolated approaches are totally inadequate.”⁵¹ Failure to recognize this and to work with our imagination to create new and better futures, considering the necessary symbiosis of the pristine and the artifact, will lead to endless projections of present trends and a petty unfolding of technological possibilities which, in the end, can only leave man crippled.⁵² But, “When man is the subject, the proper understanding of science leads unmistakably to the science of understanding.”⁵³

The pristine was the source of spiritual awe from the dawn of time, through the star at

46. Fred Blum, “Social Consciousness and Social Values”, in Irving L. Horowitz, ed., *The New Sociology* (New York: Oxford, 1965).

47. Richard F. Ericson, “The Impact of Cybernetic Information Technology on Management Value Systems”, *General Systems* 15 (1969).

48. Kevin Lynch, “The Possible City”, in William R. Ewald Jr., ed., *Environment and Policy* (Bloomington: Indiana University Press, 1968).

49. Oliver J. Caldwell, “Global Education and the New Humanism”, *The Bridge*, Occasional Paper No. 5 (July 1970).

50. Thomas B. Colwell Jr., “The Balance of Nature: A Ground for Human Values”, *Main Currents in Modern Thought* 26, no. 2 (1969).

51. Julius Stulman, *Evolving Mankind’s Future* (Philadelphia: Lippincott, 1967). Also see, John David Garcia, *The Moral Society* (New York: Julian Press, 1971).

52. Elise Boulding, “Futurology and the Imaging Capacity of the West” Symposium on Cultural Futurology, September 1970.

53. Floyd Matson, *The Broken Image* (New York: Braziller, 1964).

Bethlehem to the lunar landing. The Alps, the Andes, the Himalayas, Norwegian fjords, volcanos, the Grand Tetons and Nature's wonders still provide this spiritual awe. I recall from childhood the beautiful sight on Alabama's prairie of flocks of herons in late afternoon with their white plumage etched against the gorgeous cloud colors and a setting sun. It humbled me. Bach's music does me the same way—it evokes a value sensitivity—a feeling of ever spiraling wholes—tides of human interconnectedness bursting with crescendos of cosmic awareness. The story of "the other wise man" and the Good Samaritan serve also to remind us of the value of man's humanity. When this human value is lost, human degradation and brutality win out and man neither regresses nor progresses; he simply ceases to be man. As a brute he demolishes his values in both his pristine and artifactual world. I close with this wise observation from Henry Murray:

This spiritual phase, this symbolism, might be exemplified, it seems to me, on all levels; an embracement and reunion of the opposites: man and nature, male and female, conscious and unconscious, superego and id, reason and passion, rational and irrational, science and art, enjoyable means and enjoyable ends, upper class and lower class, West and East. Instead of dependence or independence, we may see a fruitful interdependence; instead of passive reception or greedy acquisition of great quantities of things, we may see construction . . . in short, instead of thesis and antithesis, we may achieve synthesis at the center: creation for creation. . . .⁵⁴

54. Henry H. Murray, "Vicissitudes of Creativity", in Harold H. Anderson, ed., *Creativity and Its Cultivation* (New York: Harper, 1959). See also, Preston Harold and Winifred Babcock, *The Single Reality* (New York: Doubleday, 1970).

HERE I AM

In the plain of wonder
I passed through a pasture
Smelling the grass
Which once was my state of being.
As a remembrance
I plucked a few clovers.

In the plain of wonder
I traveled a sun-baked desert
Feeling the heart of the sun,
Which once was my origin.
As a remembrance
I burned my finger.

In the plain of wonder
I reached the sea,
Which once nourished my growth.
As a remembrance
I gathered a few shells.

In the plain of wonder
I saw three hills, one behind the other.
I climbed the first and dropped the clover;
I climbed the second and dropped the shells;
I climbed the third and lost my finger.

At the summit of the third hill
I saw a high mountain
Covered with forest and invisible trails.
Not knowing which path to follow
I zig-zagged,
And with great difficulty
I reached the top.

Vigor regained and vision cleared I roamed about
Viewing the vast panorama.
To my surprise I discovered that
Innumerable paths lead to the same peak.

Reza Arasteh

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THE INTERNATIONAL INDEPENDENCE INSTITUTE

Robert Swann

The International Independence Institute is an association of individuals working for the revitalization of cooperative community life, decentralization and local control, and the equitable distribution of world resources in ecologically sound ways. It acts as a catalyst for the development of economic alternatives, stimulating new efforts for social change and helping to cross-fertilize the many ideas and endeavors that have already sprung up.

The institute firmly believes that "everything is connected to everything else", and

Robert Swann, an economist and architect, is director of the International Independence Institute (III), which he helped found with Ralph Borsodi (an American author and economist who taught at the University at Ahmedabad). Mr. Swann serves on the board of directors of New Communities, Inc., an organisation concentrating on the growth of a "rural new town" on 5700 acres of land held in trusteeship in southwest Georgia. The III's work in the area of monetary reform was reflected in his January 1976 World Union contribution, "Energy, Petrocurrency, and the World Future", and its promotion of land trusteeship and intermediate technology in the May 1976 article on "Planning a Rural New Town", which Mr. Swann wrote in collaboration with Shimon Gottschalk.

while it advocates economic reforms, it sees them as the basis of profound spiritual and cultural growth. Its programs emphasize fundamental, long-range solutions to basic problems, rather than temporary stopgap approaches to immediate crises. For example, the institute believes that whereas its programs and proposals could help provide an enduring solution to the problem of worldwide hunger, many of the current proposals to "solve" the crisis will only delay and undermine the ultimate need for self-sufficiency among the hungry nations themselves.

At present the institute is focusing its efforts on three major areas: the community land trust, appropriate technology, and the alternative investment fund.

Work in these areas is conducted by the institute's associates, each of whom is involved in specific projects and many of whom volunteer their time. Each project is an effort of one of the three semi-autonomous, yet cooperative, groups whose overall vision and programs are nurtured by their association in the institute.

The Community Land Trust

In these times of spiralling inflation and rising unemployment, Americans are understandably confused and depressed. The problems we face are enormous: rising food and fuel costs; high rents and higher taxes; decaying tenements, farmlands and forests; plant

closings and meaningless, repetitive work. Yet many citizens refuse to be overwhelmed by these difficulties. They are working hard to make the words of Woodie Guthrie's song, "This Land Is Your Land", come true by setting up small-scale, locally controlled community land trusts and the many endeavors that such trusts can facilitate, such as food and housing co-ops, small-scale industries and farms, community development corporations and minority businesses, and community centers and health clinics. It is through these local projects that our future seems best assured, for these efforts are independent of government, legally sound and controlled by the people and communities creating them.

The earth is the mother of all people,
and all people should have equal rights
upon it.

Chief Joseph, Nez Perce' Indians

What is a Community Land Trust?

The Community Land Trust (CLT) derives from an ancient idea of caring for and sharing the earth, an idea in which the first Americans believed. It is based on stewardship for ecologically responsible and socially beneficial land use. It may be defined as a community organization, most often a nonprofit corporation, which holds land to ensure its ecological, nonspeculative use by individuals and groups for the benefit of the community in which it is located. The land cannot be sold and thus be used for private gain, and its users are protected by long-term leases that guarantee them access without the high costs of ownership so long as they respect the land and use it in accord with the needs of the surrounding community. The primary concern of a CLT, then, is not with common ownership but with trusteeship for the common good.

Today, more than twenty CLTs exist in

the United States, and many more are being formed. Their landholdings range from a few to several thousand acres, and they are involved in helping leaseholders develop financially sound and socially beneficial land usage. The International Independence Institute has been involved in this movement since its inception. The institute and its associates were integrally involved in the formation of the first CLTs in this country, have organized and participated in numerous conferences and workshops on land problems and stewardship, and wrote the first (and only) book on the concept, *The Community Land Trust Guide*, of which 5,000 copies have been sold. Requests for information and organizational help pour in from citizens and groups in all states and from abroad.

The Community Land Trust Center

Due to the growing interest in the CLT concept and its applications, the institute's CLT associates are establishing the Community Land Trust Center. The center provides public information on land trusts and functions as a clearing house for relevant materials and training, and as a research group exploring the critical problems of policy and operation that CLTs encounter.

Its programs encourage the development of CLTs in several ways.

Correspondence: The CLT center maintains files on those interested in the CLT concept in all areas of the country, as well as resource materials and information sources. It corresponds with well-established and fledgling CLT groups, both in the United States and abroad, and uses these files to provide suggestions, technical information and news of others' activities and discoveries. It also receives and responds to a large and fast-growing number of requests for information about the concept and its applications, from con-

cerned individuals, conservation and community groups, and government agencies in both city and rural areas.

Literature and reprints: The center is compiling an annotated literature list, and makes literature reprints available at cost.

Speakers bureau: The center maintains a list of speakers available to audiences interested in land stewardship.

Research and publications: The center prepares and publishes pamphlets and position papers for the general public and for CLTs now existing or being formed. A network of consultants and volunteers in such areas as law, finance, accounting, planning, forestry, housing and community development is being assembled. A major project underway is the preparation of a new CLT book, which will contain a survey of existing groups, technical and policy matters involved, and available resources.

Library: The CLT center is assembling a library covering the many fields that relate to land trusts, stewardship and community development, and will provide circulating technical material for the use of CLT groups around the country.

Curriculum development: The center is working with regional and agricultural economics faculty at the University of Massachusetts to develop a course in rural revitalization, using a CLT/Community Development Corporation approach.

Seminars: The center is assembling training materials for CLT organizers, and plans to conduct training and skills-sharpening seminars using both these materials and the expertise of organizations functioning in related areas.

Audio-visual aids: The center hopes to develop slide shows, tapes and a film for pre-

sentation to groups interested in land stewardship as well as current and potential CLT organizers.

Outreach: The center will work with local, regional, and state agencies to develop programs for land use planning, and community economic development.

Grants: The center feels it essential to promote the development of stable and effective CLT prototypes, and will work most closely with CLTs near its home base in New England. It hopes to establish a fund to assist and strengthen them through grants to help meet administrative and operating costs. Although many of these CLTs are involved in numerous community endeavors and hold several parcels of land in trust, they need assistance to sustain the staff and offices required to continue and expand their activities.

Appropriate Technology

Environmental destruction; shoddy goods and services; boring, routinized jobs; and the loss of group identity and community life stand among this nation's most critical problems. While the roots of these problems run deep, partial cause is to be sought in our growth-obsessed, capital and energy intensive technologies and our depersonalized, purely quantitative standards of economic development.

Appropriate (or "intermediate") Technology (AT) may be characterized as the use of modern scientific knowledge to create production methods that emphasize human dignity, environmental sensitivity and fulfillment of local or regional needs. More simply put, it is "a technology with a human face . . . which, instead of making human hands and brains redundant helps them to become far more productive than they have ever been

efore".¹ Both comparatively simple and small in scale (in order to tap the latent skills and initiatives of people lacking sophisticated technical training) as well as comparatively cheap to establish (in order to create more work-places for any given amount of capital), 'appropriate' technologies are seen by the institute's associates as part and parcel of a more just and sane social order.

In 1975 the institute's AT associates formed a working group to foster the development of appropriate technologies in several ways.

Weston methane project: On land being provided by the schools of Weston, Massachusetts, the institute's AT associates are working with the Weston school students to construct a solar-heated methane digester. In this partly educational, partly experimental project, they will test the heating, cooling, and lighting uses of methane gas and will experiment with the resulting sludge to explore its application as fertilizer. Simultaneously, they are assisting the Weston faculty to create curricula which can be used as models for adaptation to other schools. AT associates view this project as a first step toward the longer range contributions of a more embracing, more extensive Boston area group.

Appropriate technology film: In cooperation with advanced students and faculty of the film section of MIT, AT associates are involved in the development of a film that will probe the implications and document representative applications of appropriate technologies in the United States. Shaped to reach as diverse and wide an audience as possible, the film should prove of value to both educational television and for showing

at state and county fairs, for project-oriented task forces, high schools and universities.

Information and cooperation: The institute's AT associates hope to develop cooperative programs with other groups in New England, focusing on AT and related issues. They are furthering the growth of an information-sharing network between groups developing appropriate technologies and people seeking information about them.

The Alternative Investment Fund

Over the past few years the institute has investigated the development of an alternative investment fund to fulfill the needs of the many individuals and institutions seeking socially significant investments for their surplus funds. The purpose of the fund would be to finance land purchases and capital needs of community land trusts, community development corporations, cooperatives, and minority or community enterprises. The institute's research indicates that such a fund is feasible and that a large group of investors is ready and anxious to participate.

The fund may also be involved with international development programs based on a highly successful three-year experiment with small-scale credit among Mexican Indian farm families. The experiment, in which the institute took part, demonstrated the importance of small amounts of credit to farmers for increasing food production. Over 1,000 farmers participated and, with only \$50,000 of revolving credit funds, many increased their production by two and three times. This was convincing evidence that one answer to the world hunger crisis lies in combining small-scale, appropriate technologies with credit for farmers and small rural enterprises.

The institute is concerned with the long-range goal of establishing permanent struc-

1. E. F. Schumacher, *Small Is Beautiful* (London: Blond & Briggs, 1973).

tures for community-based credit and banking. The Institute believes that—aside from appropriate technologies and access to land for ecological and productive use—the most important need from the standpoint of rural development, world hunger and international peace is the creation of a stable world money system that can provide all the necessary credit for small-scale farming and rural industries. Such a non-inflationary and non-deflationary system would use a worldwide commodity index as the basis for a new monetary unit, to which end the institute has sponsored several research papers and experiments.

The Exeter Experiment: Sponsored by the institute, this research project was launched by Dr. Ralph Borsodi in 1972 and reported in *Forbes* and *Business Week* as demonstrating

the feasibility of a stable value, local currency.

Commodity index: Research work on a worldwide commodity index has been going on since 1967, under the direction of Dr. Borsodi.

Articles: Several articles have been written on monetary questions. The most recent one, "Energy, Petrocurrency and the World Future", on the possibility of third world countries initiating (perhaps through the United Nations) a new world bank backed by locally produced commodities of worldwide importance has produced wide and favorable attention.

Position papers: A series of position papers or policy proposals for such a world banking system are now completed and are soon to be published.

AUROSCIENCE—II

A Science of a New Consciousness

Alexander Brodt

C. One-Vast-Integrality

The foundation of Aurologic is a triple oneness which encompasses absolute and differentiated unity, as well as the unique oneness of individuality. It so follows the movement of the Reality's self-manifestation, from the transcendent One to the universal and individual One.

ONE-IN-ONE

Identity : Union

The formula One-in-One condenses what more explicitly can be expressed as: the One in its state of perfect undifferentiated unity. The One denotes here either the supreme Existence, and then the formula stands for absolute transcendent oneness; or it symbolises all relative undifferentiated Identity of individualities and particular things or universal being.

Union, the corresponding logical dynamis, consists of the identification with beings and things and the All and what is beyond it, and of the junction of many varying elements into one single whole. It serves as the method for a progressive awareness of the unity of all existence; for an identification with an object of knowledge or inquiry and with various aspects of a problem, different theories about a phenomenon, many viewpoints in general; and also in creative thinking, for the combination and fusion of various mental formations into an encompassing whole.

Identity, the natural result of union, is a total unity of all variables, as distinguished from partial equality, where, if two entities are compared, there is a part in which they are identical but also elements in which they differ from one another. Identity, therefore, does not mean that various realities are equal, but that there is only one single reality to which different names are given.

In practice, the aurological movement One-in-One consists first in the effort towards becoming aware of the identity of all existence by means of a progressive unifying vision and expansion of consciousness. The first step takes the mantric thought "All is One" as the vantage point for all mental activity. The mantric power inherent in this formula works automatically towards an increasingly living vision and experience of its content; moreover, it sets the mind from the very beginning in the right direction for truth-thinking. As a further step, it is helpful to make use of thought-systems and scientific discoveries, symbols and parables, revelations and experiences which are an aid to clarify, and which intensify and concretise

this oneness. A more advanced implementation applies whatever meditation- and concentration-techniques are individually suited to the development of a more and more vivid, subtle and direct union and identity. However indirect and initially abstract the way may be in which these are performed, One-in-One is nevertheless the supreme logical operation and constitutes the mainstay of Aurologic's other eight movements. One-in-One is the alpha and the omega of truth-thinking, its starting-point and its consummate achievement; a fulfilment that is completed and helped by the other eight movements. These are on the one hand of great value in order to establish union and identity ever more firmly, to make them more concrete and more palpable; and on the other hand they enrich oneness with its own manifold self-expression and thus bring the whole potential inherent in the play of the One with the Many to a full flowering in the dimension of the mind. One-in-One is the alpha of truth-thinking because it founds itself on and commences with unity. Just as the earth is enveloped in the physical atmosphere, so truth-thinking is embedded in the spiritual ether on the One-in-Oneness. Without the oxygen of identity, without union which is the breathing of this air, truth-thinking cannot be born and flourish. Whatever problem is tackled, wherever the flights of imagination and thought and vision soar, the remembrance of the Reality's Spirit-Identity and absolute oneness is the friend and guide who will constantly accompany the mind on its journey towards the universe of truth. Oneness is the soul of Aurologic, Allness is its body and being, Manyness is the dynamis of its becoming.

One-in-One is also applied in the detailed process of thinking. Here it reveals itself first as an exercise for our mentality to identify itself with an object of knowledge, a phenomenon under investigation and the various sides of a problem, and also to follow sincerely and open itself to other arguments, theories, insights and experiences than one's own. Union seeks so to understand and think in a direct and concrete livingness and to grasp unknown and foreign knowledge intimately and fully, from inside, and not merely from a predetermined, external, mental standpoint. It serves to deepen one's comprehension and to enlarge one's established viewpoints, discoveries and illuminations with a vision from many perspectives and an open and flexible approach to everything. A catholicity sustained by a multifaceted in-depth understanding presupposes for its accomplishment the identification with all the various aspects which present themselves in each case.

Identification, however, is only one aspect of union, namely awareness: to identify oneself mentally with the different sides of a problem means to become aware of them more integrally and intimately than a distant and external perception from a fixed mental position can achieve. The second aspect of union's realization in the active thought-process is the formative one where unions are mentally created through the combination or fusion of different logical, cultural, mental constructions, viewpoints, theories, images and symbols—in short, of all conceivable thought-substances. This evidently continues the identification process.

The first step is to identify oneself with the various formations, and the second is to unite them into a new whole which encompasses them. The joined entities are included in their entirety, that is, all the constituents of each entity participate in the union and become a part of the resultant whole. However, although union is thus integral, it need not necessar-

ily be also radical: it can combine different constructions without abolishing their individual proper identity; as, for instance, biology does with its subdisciplines which are entirely part of it, but still possess their distinctive identity as paleontology, botany, zoology and the human life-sciences. Or it merges formations radically resulting in a homogeneous whole in which the original components are no longer discernible in their initial nature. An instance for this fusion process marks the new and still rudimentary discipline of ecology, the science of the interrelations between organisms and their environments. A deeper probe into the true reality of ecology makes this evident. Ecology amounts to the study of the interactions between consciousness-force fields, for each organism and each environment constitutes such a field of interacting levels of consciousness and their play of forces. Naturally, all aspects of organisms and environments have to be taken into account, since all participate in and influence the mutual relationship, and so real ecology goes beyond the biosphere and includes also the geosphere, the noosphere and the logosphere. A mature ecology can therefore only be the result of a fusion of the relevant portions of *all* disciplines of human knowledge. Ecology as the holistic science of consciousness-force fields emerges thus as a new and homogeneous discipline in its own right. The fused branches of knowledge are no longer discernible as distinct subdisciplines—otherwise ecology would absurdly be the super-discipline of all branches of learning—but result in the emergence of a new limb on the tree of knowledge in which the substance of all the other limbs is blended into a homogeneous new reality.

Whether we have a radical fusion or just a combination, union always achieves a synergism where the whole which emerges from uniting the different elements transcends the sum-total of all its parts. This is naturally so, as the synergistic effect constitutes a universal law: collaboration, symbiosis and junction are bound to go beyond a mere addition of the components; their union is a new creation, per se, and each constituent is enriched through its relationship with the others.

The importance of the formative aspect of the One-in-One for the implementation of truth-thinking in all domains of thought and life needs no elaboration. Truth-thinking aims at a healing of division and a transcendence of isolation. Evidently, to unite the bits of information, the logical constructions, the formations of thought and imagination with which the noosphere is vibrant serves as a medicine par excellence for the illness of division, the root-cause of all illusion and ignorance.

Four basic characteristics of the first aurological movement emerge.

Its essential effort lies in a progressive awareness of the fundamental oneness of all existence.

All mental activity is approached first from this unity which is kept constantly present (however abstractly) as the stage on which all truth-thinking unfolds itself.

One seeks in all fields of mental life to identify oneself with the objects of inquiry and thought, with the different aspects of a problem and the various insights and truths which are pertinent to each case.

Such divergent facets, as well as different mental elements and manifold thought-

substances in general, are united—either joined or fused—into a whole which surpasses the sum of the particulars so that they grow into a new synergistic One-in-One reality.

ONE-IN-ALL

Equality : Communion

One-in-All is the formula for differentiated unity: the One as a single whole in which all play of difference and multiplicity is enveloped and immersed. The Many are here the mere background of an immanent as well as an all-pervading and all-containing oneness. Naturally, the One can stand also in this formula either for the supreme existence or for cosmic or individual being.

The path leading to the awareness of the One-in-All, the logical dynamis manifesting it, is denoted by the term *communion*, which means here a having in common, being united. Communion—differentiated union—can thus be defined as the quest for an extrication of and a revelation of that which things have in common, of that in which they are one and equal. This commonness and unity which in all being and becoming coexists with diversity and multiplicity is called *equality*.

Communion and equality are achieved through the relating of all things to their immanent unity and the exploration of their uniformity, common characteristics and shared elements. It is the crystallization of the single network with its unending diversity ever centred and imbedded in oneness which constitutes all manifested existence. Communion seeks to discover in all domains of knowledge and life how the strands of this single global network are combined, so that the awareness of it increases in living intensity: the holes in the net progressively vanish, leaving finally a perfectly compact Reality of supreme plenitude.

The initial step towards the implementation of the One-in-All consists in the investigation on one side of the fundamental equalities which underly the manifoldness of existence as a whole, and on the other, in the quest of what different individual realities have in common. The latter is a relatively easy and yet fruitful exercise which can readily be taught to the smallest children as an amusing game in which they look at themselves and their environment in order to find out in what ways these different worlds are equal—the same shape, the same age, the same height, etc. The corresponding educational materials of modern mathematics, which are in the process of being developed all over the world, present a rich treasure and stimulating field of exercise for this training through play and also for a more advanced and complex education. They can be applied by the young of all ages as an initial material groundwork and launching pad towards more subtle and vast equalities. These materials will also serve as an aid for the other aurological operations, though for some they need to be expanded or added to. Equally of help for communion are the initial methods described in the section One-in-One. All the other aurological processes contribute also to the practice of the One-in-All: as Aurologic is a single interdependent whole, all the other operations participate in each movement and work together to bring forth its potential opulence.

There remains the investigation into the equalities of the whole existence, for which naturally the just outlined method serves also. It is achieved particularly by seeking for the archetypes which support, contain, inhabit and condition all being and becoming. These rep-

resent always the initial framework for the acquisition of a holistic truth-knowledge.¹⁵ The vision of the inmost essentialities which express themselves in the outer embodiment, the awareness of the fundamental cosmic and ontological powers, the dynamic substratum of all movement, action, development, and the perception of the original paradigms and super-systems of which all particularities are portions and manifold manifestations, must necessarily be basic to a surface-transcending comprehension and conception in the light of the Truth.

These universally shared archetypes are the basic common structures and dynamics of all existence, the thread of unity woven into varying, and on the surface seemingly unconnected, phenomena and happenings. They give us the key for the right relating and gauging of all problems and objects of knowledge—the focus on moment, instance and details is transcended by an ampler and more far-reaching vision, penetrating the prototypes and prime-movers which underly, constitute and activate each individual thing and being. Aurologic itself exemplifies this. Its nine movements are such an archetype. They correspond, as outlined earlier, to the Reality's nine fundamental processes of creation, the original operations of existence which work out, fashion and function in all being and becoming. Thus only by basing itself on an archetype of existence can Aurologic at all come into being and operate. This also enables it to be sufficiently plastic and wide to serve as an over-structure in which all mental processes and abilities find their integrated place, either as a detailed and specialised further development of one of the nine main movements, or as combination or fusion or constellated configuration of more than one movement. Aurologic demonstrates in its own structure how such *gestalten* are applied for mental computation and creation, and how important and useful they are for a holistic thought-process which must sustain itself on the archetypal equalities in order to be able to cope successfully with particulars and individualities, as these are founded on and interwoven with the common universal ground of the former.

However, to become aware of equality and communion in individual instances and on a universal or even supracosmic scale does not exhaust the implementation of the One-in-All. Similarly, as in the preceding movement of union, the perception of communions is complemented with their conception and formation in the creative thought-process. Here communion functions naturally as a partial union. While union combines the objects of mental activity integrally, uniting formations in their completeness in an encompassing whole, communion joins only part of the elements of each formation, and leaves part still outside the junction. The unifying movement of communion mediates thus between unity and diversity, linking the Many ever closer until the perfect oneness of union is reached, and communion so merges in its upper limit: the One-in-All becomes the One-in-One.

The object of communion is thus to bring together different and remote phenomena and thought-substances into symbioses and networks. This is achieved by reinforcing the already existing, overt common equalities of the entities to be combined, and by extending

15. In part two of "Auroscience" (which is not being now published) these archetypes form the main body of a system of methodology, Auromethod.

more and more this shared ground, thereby clustering the various objects of the thought-process ever more closely together. If the points of contact and the overlapping areas of the entities are minimal, new aspects are developed in each entity which all of them share, and their potential of latent equalities is unravelled and made manifest overtly: a growing common ground is created, a shared centre around which all diversity orbits and which unifies the thought-objects progressively, attracting like a force of mental gravity the different satellites to the common central core.

For the achievement of this progressive unification, all the appropriate other aurological movements are applied; they serve here as the special methods which are focused on the goal of the progressive communion to be accomplished. The roles which movements like harmonization, relation and inclusion fulfil here are visible in the unifying tendency inherent in their very nature. Equally, the last three dynamic movements of generation, transformation and development have their function in the metamorphosis of diverse single formations into communions.

Communion is illustrated by general principles like syntropy, the movement towards increasing order, harmony and unity, or symbiosis, the collaboration of various systems which mutually benefits all of them and unites them into a network, a communion. This is today visibly emerging more and more in all areas of life. For instance, where in the past we had different clearly demarcated sciences, we have today a growing communion. Disciplines like biochemistry, astrophysics, exobiology, and social anthropology clearly show that the different scientific disciplines are becoming more and more integrated—an increasing communion.

The partial and differentiated conjunction of the One-in-All plays an obvious role in the formation of new systems and creations emerging through its junction of entities. It also enhances the process of comprehension which is often triggered by the right combination of various aspects of a problem or bits of information. Further, it serves as one of the key operations for a systematic and harmonious arrangement of all the constituents of one's individual mental activity in particular, and of the entire universe of knowledge in general—hence, of all phenomena and dimensions of Reality. Such an endeavour must naturally use the combination process as an important agent in forming a cosmos of knowledge out of a chaos of arbitrary and often even antagonistic knowings. The unifying movement of communion is therefore essential for creative thinking, clarity of understanding and meaningful constellation of knowledge.

One-in-All, equality, communion are thus implemented in short by the following steps:

The quest for the unity which is ever-present in all multiplicity and diversity through the exploration of that which different realities have in common, that in which they are equal.

The search for the archetypes and arche-powers which are manifoldly developed in the self-manifestation of the supreme Reality and so constitute the common substrata of all existence.

The approach toward all objects of knowledge and all mental dynamics from within the framework which results from the above two implementations and which enhances a unifying vision, evaluation and interrelation of all individual phenomena.

The formation and creation of communions through the partial and differentiated combination of entities, constructions and movements by joining some aspects of them while leaving others outside of the combination.

ONE-IN-MANY

Diversity-in-Equality : Vari-union

The periphery of the triple oneness enters the last portion of its curve with the One-in-Many: here the play of multiplicity predominates over unity. Oneness recedes from the foreground and becomes instead the background for the inexhaustible drama of diversity, staged by innumerable individual actors. However, this does not lead to the abolishment of unity. Instead it is involved in the Many as the unique oneness of each individuality; and it also accompanies all diversity as an ever-present support on which all multiplicity is essentially founded.

Diversity-in-equality is the opposite pole, the complement to equality. It represents the body of difference in which equality is incarnated and by which it is diversely expressed and manifested. The One that is All contains all and inhabits all, such is the unshakable oneness immanent in and sustaining all diversity. The One that is the Many and ever unique constitutes the formula of variation that equates the equal One to unequal Many and produces all individuality and difference. Difference in Aurologic, however, does not mean division, for which it is too often falsely taken as a synonym. As a matter of fact, division, as Sri Aurobindo explains, does not exist outside the divisive mind; it is the mind's false transcription of variation-in-oneness which is here called diversity-in-equality: difference which does not abolish equality and unity, but reveals it variously and keeps it ever present as a unifying background.

The term *vari-union* denotes that in which united things (and in the Oneness-Reality all things are united) are different. Vari-union—multiple, unique union—consists therefore in the formation of diversity and the becoming aware of that in which things are unequal. This would be after all fairly easy for our divisive brain-mind were it not, however, that difference is in reality variation-in-oneness. One must therefore be simultaneously conscious of the all-pervading unity as the playfield of all diversity. The essence of vari-union is precisely that, even though the play of the Many in its unending diversity is present in the foreground of the consciousness and although the mind is keenly aware of it, the contact is preserved with the unity. The latter needs to be simultaneously present as the "environment" in which all multiplicity unfolds.

The practice of the third aurological movement begins with the invocation and remembrance of the oneness of the two preceding movements. Unity is the inner *asana*, the basic posture of consciousness for the implementation of the One-in-Many. Without leaving this initial vantage-ground, one can then pass on to the second stage: the concentration on difference and variation. This needs no further clarification, for the whole past evolution of the human mind has worked to develop a thought-process based on differentiation and reduction. Consequently, the achievements accumulated in the past can all be integrated into vari-union according to individual penchant and need. Naturally, this integration of the evolutionary

accomplishments constitutes a salient feature of the whole of Aurologic—integrality belongs to the three essentials of truth-thinking.

The crystallization of diversity-in-equality further requires the transcendence of superficialities, the seeking for true individuality, that which is really unique and not what might seem to be so but is in fact only a mechanical programming of nature, of the physical, vital, mental environment, of society and its surface customs. Apparent difference presents merely the first stage from which one needs to proceed, probing deeper and deeper into the nature of phenomena, to in-depth distinctions and essential difference. The objective of the One-in-Many is, as the formula expresses, to penetrate the unique oneness of each of the Many, the inmost thing that is singular, a real individuality, behind and beyond the ever-changing yet ever self-repeating flux of life.

This progressive penetration is illustrated in the simple example of the difference between human beings. In rough outline: the most superficial distinctions lie evidently in physical structure and appearance. A little deeper diversity is manifest in the outer circumstances of life, social roles and positions, etc. A step further leads us into the psychological domain of character, emotional nature, mental abilities and so on. And an in-depth penetration would advance to the different subliminal, psychic and spiritual personalities. Likewise, the comparison of physical materials also leads from their appearance to their attributes and applications, then to their chemical structure and reactions and further to the subtle principles, archetypes and forces, involved and acting in the material frame, drawing, so to say, the strings of the physical marionette. A progressive transcendence of the surface to the depths behind is thus always the path to the unravelling of true diversity.

The third aurological operation seeks to accord to the Many their appropriate role in existence through a transcendence of division without abolishment of distinction and difference. By approaching multiplicity through the lens of unity and by penetrating to the in-depth diversity behind the surface-variations, vari-union gives a new status to the Many. It serves to reconcile oneness and multiplicity as complementarities in the cosmic play and to promote understanding and expression of this manifold play of the One in all its riches.

Like the two preceding operations of Aurologic, the One-in-Many is also implemented creatively in formative mental dynamics. Naturally, it constitutes the inverse movement of the One-in-All's effort to combine the most diverse thought-substance and phenomena in communions. While communion follows the movement from complete variation and difference to an ever-growing equality and unity, from the Many to their progressive unification until the perfect union of the One is attained, vari-union takes this union as the vantage-ground for an ever-expanding realization of variation, of differentiated manyness—the development of the One into the Many. It works thus for a diversification of systems and constructions, which are either a self-existent whole, a union, or a partial conjunction of various entities, a communion, until they become the parents of other systems. It transforms unions into communions, and varies the latter so that the common ground of equality shrinks and they are transmuted into ever richer diversities, into many new systems. This is accomplished by changing the relations between the components of a system, by adding new elements, by bringing out its latent potentialities and by combining a system with other ones,

producing a mutual interaction and new development. As was the case in the preceding One-in-All, here also the appropriate other aurological movements serve to accomplish these processes by being applied as special methods directed towards the achievement of vari-union.

The terrestrial biosphere itself best demonstrates the process of vari-union. The basis of all life is the self-replicating and self-varying DNA molecule with its four nucleotides which produce twenty universal amino acids; the latter work out the 100,000 various proteins, and the proteins develop the inexhaustible diversity of life. On an ever-present substratum of oneness is thus unfurled the unfathomable complexity of all life, in which no two beings are equal. Vari-union in the practical formative thought-process pursues the same course, developing any basic system or thought-substance (a philosophical doctrine, a scientific principle, a poetic vision, a spiritual revelation, etc.) into manifold variations and applications, which still are not divided, since they all are centred in a common essence. A scientific discovery, for instance, might give rise to other discoveries, new technological applications, science-fiction literature, social-management facilities, to new social visions and theories, new systems of philosophy, a new art—the list could continue endlessly. It goes without saying that in truth-thinking this formative diversification unrolls in harmony, as all the different evolutes are developed with a unifying consciousness of the common equalities ever-present.

We see that communion and vari-union are complementary ontological movements and so are of equal importance in truth-thinking. In the play of the Reality, vari-union, if not balanced with communion, ends in division and isolation and ultimately in the very opposite of the intrinsic truth of Reality. Communion without vari-union would have no *raison d'être*, but would merge into union, into a supreme, though unmanifest, oneness, robbed of its manifold divine play. As Aurologic founds itself on the very logic of being and becoming, it necessarily reflects these complementary truths in the dimension of an enlightened mentality.

A concluding focus on the successive stages in the realization of the third aurological process follows.

All quest for difference begins with the remembrance of the all-pervading oneness which must never be lost sight of in our expeditions into the world of difference.

The treasures of diversity and individuality are monitored on the screen of an ever-present oneness in the vision of the multiple being and becoming of the one Reality.

There follows the progressive movement from surface-distinctions to in-depth differences, true individuality and inmost originality.

Finally, vari-union is practiced as a diversification process in formative thinking. Here it forms and elaborates, as well as develops from a latent state, all possible variations of unions and communions, thus developing single systems into many new systems, and linked clusters into diverse single systems.

D. All-Truth-Transparency

On the foundation of the Vast rises Aurologic's structure of Truth. Truth, like the Vast, is embodied in its three cardinal aspects which together constitute the Truth-mosaic. The three

complementary aspects are: the all-inclusive and all-pervading infinity; the interdependent network of a multidimensional relation of everything to everything else; and the unifying synthesis of harmonization. The progression (All-in-) All, Many, One moves here from infinity to any number to the unity. It thus leads from one pole of the Many—the totality—to the other pole—the singleness.

ALL-IN-ALL

Globality : Inclusion

Each single thing contains the All, is the All and each element of it. This is the meaning of the All-in-All. It denotes the presence of the infinite and the whole in all being, and consequently implies that the resources of each thing are essentially unlimited. All-in-All is thus the holographic formula for the omnipresence of the Reality in its self-manifestation, in which every element is pervaded by the totality, emerging from and blending with infinity. It also imports this holographic presence of the whole in each part of any universal or individual totality; the All is here a parameter which can stand for a whole of any dimension and type.

Globality results from the relating of the finite and the part to the infinitudes and wholenesses of which they are a facet and a portion, and which are contained in them. It is the characteristic of a liberated thinking which expands and penetrates to the infinite everywhere, so that the delimited becomes a transparent play of the limitless: as the light-game of spectrum-reflection the infinite is mirrored by the finite in numberless facets which are one with the first, are contained in it as well as include it. Globality can thus be defined as the awareness of the finite always in communion with the infinite: the linear becomes, as it were, a wave moving seamlessly on the surface of the vast expanse and fathomless depths of the ocean of existence.

Inclusion is the path which leads to the crystallization of the All-in-All's globality. The dynamis "inclusion" integrates the smaller into the larger, the part into the whole, individualities into their respective universal networks; in general progression: sets are integrated into the system of which they are a part, systems into the field which encompasses them, fields into a hierarchy which they constellate, and so on, ad infinitum. Inversely, by pursuing the opposite direction, it unravels all the contents of a phenomenon, proceeding from a whole to its constituent systems, elements, potentialities, also ad infinitum.

The practical actualization of the fourth aurological movement commences with the effort to become aware of the infinite and its presence in everything. This progressive expansion and subtilisation of consciousness is accomplished in a similar manner as that outlined for the One-in-One. In short: The mantric truth, "All is present in All", is taken as a starting-point and central pivot for all mental activity, turning the thought-processes into a concentration on the All-in-All, into the development of an increasingly vivid and concrete comprehension, awareness and expression of the holographic presence of the whole in each part. Contemplation on all relevant and illustrating symbols, parables and artistic presentations, thought-systems and scientific discoveries, experiences and revelations serve as a further aid and method. Any suitable meditation discipline and concentration technique can

be applied for a more advanced, intimate and subtle contact and experience of all-pervading infinity.

This development of an All-in-All consciousness, which is naturally sustained and enhanced by the other aurological movements, is the second foundation of Aurologic. To the first pillar, the awareness of the triple oneness, this second adds the awareness of the infinite and its world-play—the subject of this and the following two aurological operations. Evidently, this awareness needs also to be ever-present in all mental dynamics as the limitless arena in which all thought-processes unfold; as the endless ether into which all objects of knowledge merge behind the transparent masks of their delimited individual reality.

Next, we come to the application of globality in the active thought-movement. The initial step proceeds from a global vision of existence, into which all particular phenomena are then integrated. The process of inclusion is furthered at the extremes of the Reality, the wholenesses which contain all being and becoming, and which are contained in everything: the basic structures and dynamics, the hierarchies and cycles of the ontos. One approaches all mental activity from the all-embracing vantage-ground of the archetypes, paradigms and common substrata of existence; the inmost causes, essential processes and final goals of the world game; the total unfolding of the universal drama of being and becoming. Into this holistic panorama are then integrated all dimensions and aspects of existence and all details of particular things, events, processes. The finite and the part are always approached in relation to the whole and are never separated from their transfinite substratum. This focusing of the particular through the eye of globality pierces the illusive surface-appearances; it expands all phenomena from their partial outer reality to the fullness of their real being behind. This is evidently basic for a true knowledge and an in-depth comprehension. Only by relating the finite to the infinite can the finite be understood.

Phase two moves from the vast extremes of Reality to the middle-regions, with which one has to deal in the process of truth-thinking: here inclusion operates within the field of all phenomena which can possibly constitute the object of our mental activity. Globality in the domain of the particular is achieved in a similar way as is globality in the field of the universal. The stage is set with the quest for the individual fullness of a subject or object. The apparent reality of each phenomenon is approached as a momentary, partial expression of its subliminal essence and totality. Consequently, the basic question is: What are the central truths, the integral network of motives, processes, goals, the plenitude of the existence pertaining to the phenomenon which is under investigation? The next step integrates, then, into this vision of the elementary and the whole, the subordinate and temporal surface-manifestation with its various details and portions.

To illustrate this process we can direct it towards the investigation of our own human identity. Research into ourselves must base itself on a global vision of the human being, in the light of which the different parts of the personality reveal their full significance. A partial, reductionist approach, which studies a portion apart from the whole personality, can only move from one distorted cut-section to the next. A fruitful research must imperatively transcend the small cut-section of our surface-personality in order to expand into our subliminal plenitude of existence, to focus on our inner truth, to penetrate to our full identity, to reach

out for our most integral possibilities. Into this wide framework, all the layers and parts of the complex human personality are then integrated. The subpersonalities and psychological phenomena become transparent through this perspective of their encompassing wholeness. The fullness of their deeper being reveals itself in the global mirror.

Inclusion is further developed in a sort of chain-movement which follows the organic continuum from the particular to the cosmic to the supracosmic and so marries the various dimensions of existence. The plenitude of a phenomenon is integrated into its supersystem; the fullness of the supersystem into the next higher supersystem, and so on, until one arrives at the whole of existence. One proceeds thus from wholeness to wholeness in an organic linking of all the systems in the hierarchy of the ontos.

An elaboration of the previous example of our human reality illustrates this. The chain-movement positions humanity truthfully in the next supersystem, the earth, the geo-, bio-, noo- and logospheres. Next, one proceeds to integrate the fullness of the earth into the cosmos with its continuum from the more subtle universes to the grossest, the physical universe. The manifested cosmos, in turn, is included in the transcendent realms of existence and these in the plenitude of the Reality. The human personality is in this way embedded organically in the hierarchy of existence and linked with the whole Reality.

Thus, we progressively expanded the range and the dimensions of our field of vision. We stretched, as it were, the elastic band of our awareness of a phenomenon on one end until it was expanded to infinity, to the plenitude of Reality. It remains to take up the other end and to follow its contraction until we arrive at the presence of the infinite in the infinitesimal, and so a topological configuration is achieved: a spiral-movement within the four dimensional "sphere" of an omnipresent infinity whose plenitude knows of no center and surface, whose "center" is everywhere, whose "center" and "surface" are one.

This "contracting" chain-process moves thus in the inverse direction, from a given system to the subsystems included in it. It follows the hierarchy downwards, penetrating the contents of a phenomenon, progressively advancing toward its deepest, inmost core—until one arrives at the presence of the infinite in each thing, where its limitless resources are actualized.

We can now conclude our example of the exploration of our human identity with the second chain-movement, directed inwards to many layers and parts of the human personality. In a very simplified outline, since each of the mentioned layers of the personality contains various levels: Inclusion progresses here from the physical consciousness to the vital (the life-impulses and life-energies, the sensations, and the heart's emotions), further to the mental awareness, and even deeper to the psychic being, the inmost individuality and soul of man, until one ultimately arrives at the full spiritual consciousness—and so at the limitless potential of the infinite Reality involved in the depths and on the heights of human consciousness.

This analysis of all the contents of human reality presents an integral picture of all the psychological levels and elements of the human being. It completes the preceding organic integration in (and therefore union with) all the systems of the hierarchical continuum of existence. The human identity is therefore encompassed; its harmonious role in the world

game and time drama of the infinite and eternal is given to the human actor. A global vision is achieved which enables an integral and real projection into the future—hence, a self-conscious advancement in the course of our human evolution.

For the penetration to the infinite plenitude, immanent in each thing, we are provided with a helpful medium by the mathematics of sets: in each set always the so-called “empty set”—that is, “nothing”—is contained. In the introduction to Aurologic, emptiness or zero has already been identified as the illusory product of the dividing reason.

The so-called empty set can therefore be defined as the set of all sets, the supreme plenitude and wholeness resulting from the synergy of all infinitudes: the All-in-All set. An investigation into the contents of any phenomenon is ultimately bound to lead us to the immanent All-potential, the omnipresent plenary set.

We may refer here also to the formula, $1 = 0.\bar{9}$. The same principle which underlies this formula serves as a mathematical representation of the immanent plenitude. Every integral number, symbolized by the parameter a , can be written in the following way: $a = a.0$. If we read this in the same manner as we did the earlier formula, we obtain:

- a everything within the given dimension
- . contains essentially, as an inmost seed,
- 0 the whole and infinite Reality.

The same holds true for all other kinds of numbers. For the integral numbers are their foundation and participate in their construction and expression; and all other numerical dimensions are either contained in the continuum of the integral numbers (they are positioned always in the interval between two such numbers), or include the integral numbers (i.e., the dimensions of complex numbers encompasses all real numbers).¹⁶

We can thus extend the scope of our formula to all dimensions. As a formula for the omnipresence of the infinite Reality is established: $a = a.0$

The All-in-All's global expansion naturally also transcends rational logic's limited number of logical alternatives, its narrow range of solutions to a problem. In truth-thinking there are an infinity of aurological alternatives and solutions. Evidently, when an all-pervading infinity is seen inherent in everything, the surface-limitations cease to be more than just one small aspect of the entire truth. A logic attuned to the truth of the Infinite can, of course, not stop short at two logical alternatives, and pose: *tertium non datur*, a third is not given or, in the wider perspective, which is emerging today, remain within the boundaries of three or four alternatives. Instead it asserts: *omnis numerus datur*, every number is given—from one alternative to an infinity, according to the dimension of existence and the perspective of the observing consciousness. In the domain of the infinite, all is possible, all is given. And so, for any problem and mental operation, there exist essentially an infinity of solutions

16. Some mathematical examples for such an extrapolation from the dimension of integral numbers to all other dimensions are: $a.b = a.b.0$; $\sqrt{a} = \sqrt{a.0}$; $a + ib = a.0 + ib.0$

and ways which do not exclude each other; they are complementary and take their respective harmonious position in the endless constellation of the whole.

Founding itself on the archetypal logic of the Infinite, Aurologic asserts an infinity of logical alternatives, expressed in the All-in-All formula: every number is given.

These then are, in short, the steps to be taken in the implementation of the fourth aurological movement:

The effort to become aware in all existence of the all-pervading infinity, the seamless blending of the delimited and the limitless, the presence of the whole in each part, denoted by the All-in-All; and to keep this awareness and remembrance always present in the consciousness so that all mental activity unrolls in this limitless arena.

The establishment of a global thought-process: all mental activity is approached from the perspective of the whole existence and its fundamentals, into which are then integrated all details of single developments and subordinate particularities.

The same process on an individual scale: it proceeds here from the penetration of, to the essence and totality of, a particular phenomenon, into which again all subordinate details and elements are then integrated. This movement is further developed in a chain-inclusion from a system to its supersystem to the next supersystem, ad infinitum; and inversely, from a network to the subnetworks which it includes, until one arrives at the limitless potential inherent in each thing. The single continuum of all dimensions, hierarchies and systems of existence is made manifest and the finite and part are always related to the whole and the infinite.

Consequently, the establishment of a global vision and creation, which goes beyond all surface-limitations and surface-divisions to the All-in-All's infinity of aurological alternatives and solutions, asserted in the formula: *omnis numerus datur*, every number of logical alternatives is given.

ALL-IN-MANY

Interdependency : Relation

The fifth aurological movement represents the many creations and configurations which are produced by the archetypal powers and patterns of existence in their process of self-multiplication, combination and interaction. The resultant omni-interrelated network constitutes all being and becoming. The formula All-in-Many denotes these manifold arrangements, connections and interchanges of all the elements of the world game, the multiple play of the All. All-in-Many embodies first the structures of being: the individual order, cosmic laws, and principles of Reality which co-underly the relations within and between beings, powers and dimensions of existence. And secondly, it stands for the dynamics of becoming: the interactions of the planes of consciousness and their play of forces, which determine all movement and development.

Interdependency and *relation* are the status and the dynamis which embody and actualize the All-in-Many; they reveal and form the correspondences and interconnections between the elements, sets and fields included in the All-in-All's globality. In the multiple oneness of the Reality everything is interrelated with everything else and therefore interdependency is all-

pervading. The process of relation serves to explore and express this unified consciousness-force field: the dynamic network of mutually interacting forces and movements of consciousness, which produces and effectuates all phenomena. This discovery of the relations between things and inherent in them naturally leads to the emergence of the order which underlies the universe and each individual phenomenon. The object of relation and interdependency is then twofold: to reveal and materialize the all-pervasiveness of interdependency by relating everything with everything else; and to discover and formulate the structures, the laws and principles, of the manifold and flexible order inherent in all arrangements, connections and interchanges of existence.

In Aurologic, relation and interdependency are firstly interdimensional. They focus on the relation of everything to the entire existence and the interdependencies between the spiritual, occult and material, between all the various ontological dimensions and aspects of Reality. An application of this interdimensionality was outlined when the truth behind the nine aurological operations was being dealt with. An entity of one dimension, the world of numbers, was related to a reality of occult, metaphysical and spiritual dimension—the zero to the absolute Plenitude, the formula $1 = 0.\bar{9}$ to its ontological meaning, the nine to its occult significance, and this further to the Dynamis of the Reality and the processess of Aurologic.

To attain true omni-science and integral wisdom, interrelation and mutual feedback and flow forward are needed between all the different dimensions of the Reality on one hand, and on the other, between all the various disciplines of the three areas of knowledge—spiritual, occult, and material, which in truth are but differently directed foci of the same search for knowledge about the one multitudinous Reality. Everything must be related with everything else, in order to bridge the gulfs of ignorance and division. In the interdependent wholeness and oneness of existence, a holistic truth-knowledge demands for its emergence that all the many loose ends, the numberless threads of life and culture and being and becoming are woven into a network which encompasses all play of diversity and complexity in its all-inclusive breadth and harmonizing unity.

It is in the light of spiritual wisdom that material knowledge transcends the state of mere superficial knowings, and the secrets at the base of the material realm are unravelled. And by relating material discoveries and inventions to spiritual and occult strata and force fields of Reality, the workings of the Conscious Force in the material domain, the outer, temporal and material results and effects of the spiritual movements and happenings are made manifest. The superstition that one thing has nothing to do with another (for instance spiritual development with technological achievements), belongs to the divisive, fragmentary, reductive and illusive thought-process of the past. Truth-thinking tries to explore the links which combine the most diverse phenomena and events: to see all so-called material and outer realities as the outcome of the corresponding inner essences, realms and play of forces; and inversely, as influencing the spiritual and subliminal consciousness-force field.

Equally, all the different areas of life and disciplines of knowledge are not separated from one another, but the interconnections, interpenetrations and interactions of the geo-, bio-, noo- and logospheres become the actual field of study. More than a mere knowing of facts is the knowledge of the links between these facts, and the capacity to relate a thing to

all others becomes more helpful than a one-sided and narrow, specialised and exclusive knowledge. This of course does not exclude specialization but complements it, embeds it in the omni-interrelated membrane of integral truth, where the right position of each specialized discipline is harmoniously accorded to it, where it collaborates in a symbiosis and communion with all others.

Reality in the past was a numberless series of parallels which intersected only in the transcendence of the infinite; Reality in the vision of the future is an infinite, multidimensional, compact and intricate web, woven out of its own substance by the one and multiple Reality: everything always intersects with all others, affects and is affected by all others.

An attempt at such an interdimensional and interdisciplinary approach illustrates the whole of Aurologic and Auroscience.¹⁷ Let us take, however, as a further illustrating instance, the above mentioned technological achievements and spiritual developments of consciousness. Technological paraphernalia are the expression in the material of supraphysical capacities and powers which are materialized in the form of this machinery. Thus, television is the material incarnation of the sense of sight, of visual telepathy, of the inner vision of the mind and the consciousness. The more advanced and refined an apparatus is, the more it becomes subtilized, and the more the matter out of which it is composed becomes conscious. A robot or computer is surely a phenomenon more developed in consciousness than an unhewn rock or some metal-ore (of course everything is conscious essentially). The construction of technological machinery is thus one of the means to infuse more consciousness into matter, to develop its potentialities for syntropic growth—thus to spiritualize matter. Further, technology is imperative for an effective harnessing of all material energies for the spiritual growth of consciousness. The technological paraphernalia enable a diffusion of the spiritual knowledge and forces in a measure incomparable without them, as is witnessed today all over the world. There is a whole cosmos of co-relations, interconnections and interchanges to discover for one interested in further exploring the lines which we have here merely touched upon.

The second stage in the implementation of the All-in-Many moves, as before, from the global and general to the particular: the implementation of the All-in-Many with regard to an individual phenomenon, to any subject of our mental activity.

The initial step is naturally to relate the phenomenon to the whole Reality. Thus a phenomenon is not explored apart from the wholeness of existence, but as its manifestation, as a part and movement of it. We have already elucidated in its three fundamental operations how truth-thinking moves from the whole to the detail, from the Reality to its evolutionary self-shaping and self-revealing in a cosmic or individual manifestation.

One advances therefore from this wholeness to the right grading, arranging, interrelating of all the pertinent details. The questions to be asked here are: What are the subtle realities,

17. A practical implementation in detail of this interdimensional and interdisciplinary relation-process is presented in part three of "Auroscience", entitled Auroknowledge. There it serves as a central method for the relating of all knowledge simultaneously to its archetypal structure, inner truth and material embodiment. This unifying approach fuses the spiritual, occult and material aspects of knowledge into a single whole, an entity or reality per se.

the play of forces, the principles and the order underlying and active in the phenomenon or problem? How is the phenomenon related, first, to its subliminal being and all the potential inherent in it; second, to all the other constituents of the supersystem to which it belongs; and third, to everything else beyond the scope of the supersystem? The movement of relation progresses thus according to the formula of the three operations of truth-thinking. First, from the whole to the part; then, from the within to the without; and lastly, from the near to the far.

A simple illustration for this multidimensional process of relation presents the following interdependency between a physical entity, a number and an occult energy. We have seen the numerological interpretation of nine, how it is related to an occult movement or reality. In the same manner, the number eight bears the inner significance: "something framed and delimited".¹⁸ This is related to the fact that an atom always attempts to possess eight electrons on its outer shell, that is, on its outermost orbit of electrons. If, for instance, an atom possesses only six electrons on its outer shell, it will be on the look-out for another type of atom with two electrons on the outer shell and combine with it—so that both will finally possess a complete shell of eight electrons. This need for electron-sharing is responsible for the generation of molecules and thus of organised matter; for without the need of a complete outer shell, atoms would have no motive or urge to combine. If this is evaluated together with the numerological significance of the number eight, it becomes apparent how force fields from different dimensions interact and overlap. The atom aspires for eight electrons in its outer shell because in this way it grows fully *delimited and framed*, and also builds together with other atoms the material *framework* of our universe. The "building-blocks" of the physical cosmos naturally need the stabilizing energy which the eight carries in itself in order to become themselves complete, fully stable, and to construct the stable structures of molecules.

The results of the preceding general and particular implementation of the All-in-Many are then fixed in this third phase. The relations and the order present in each phenomenon are crystallized on all levels of being and becoming; and so all the inner and outer, the cosmic and individual, the subliminal and overt factors are incorporated in the formulation and establishment of interdimensional laws, correspondences and formulas. The spiritual harmonies, the occult order, the laws of the material sciences are thrown into the cauldron of truth-relation. They are transmuted into the elixir which heals all one-sided, narrow exclusiveness with an integral, transparent and many-faceted truth. The principle of synergy, for instance, finds applications in various ontological domains; it can surely be counted as an interdimensional law. Our earlier examples of the formulas $1=0.\overline{9}$ and $a=a.0$ provide other instances. The scope of mathematical formulas, which are successfully applied as accurate representations of physical laws, is extended beyond the material into the supraphysical realm—here in spiritual correspondences. Such integral principles are further illustrated in the All-in-All formula: every number of logical alternatives is given; in the three dynamic formulas of truth-

18. The Mother in a recorded conversation of 18 November 1955.

thinking—from the whole to the part, from the within to the without, from the near to the far; or in the nine X-in-X formulas of Aurologic's operations.

The fourth implementation of the All-in-Many is what can be termed a truth-relation: the right relation which is the most truthful choice to be taken according to all the factors present in a given situation. In the infinite panorama of the All-in-All, the All-in-Many, then, determines the specific line which constitutes the truth-movement of each individual case. Integrality, catholicity and flexibility are balanced and completed with a firm decision, an appropriate evaluation, a particular action-procedure: the right thing at the right moment. The truth-relation is, in the light of the truth, the most effective attitude or action to be taken in harmony with the imperatives of development, the demands of the hour, the inner law of the given situation as well as of the truth-thinker.

To the All-in-All's *essentially* limitless pool of logical alternatives and solutions, the All-in-Many adds the conditioning relations which determine specific *actual* potentials and logical alternatives. In this way, both the poles, freedom and determination are brought into a symbiotic relationship, and are synthesized in the truth-harmony of an integral logic.

The implementation in essence of the fifth aurological movement may be characterised in the following manner.

The interdependency of everything with everything else which pervades all existence is explored and made overt: an interdimensional and interdisciplinary truth-relation reveals and forms the connections, interpenetrations, and interactions between all dimensions, powers and elements of the hierarchical continuum of existence.

Each particular phenomenon is progressively related to the whole Reality, to its subliminal and overt range of being, to the other constituents of its supersystem, to everything else beyond the scope of the supersystem.

The results of the two preceding operations are embodied in integral truths, laws and formulas which cover the entire Reality, synthesizing and fusing material, occult and spiritual relations of individual phenomena, cosmic being and becoming and supra-universal existence.

To the essentially limitless aurological alternatives and solutions to a problem are added the actual relations and logical possibilities. The freedom of infinity is complemented with the determination of its finite play, with the choice of truth-relation: the right relation, in the light of the truth, which corresponds to the demands and the inner law of each particular case and individual truth-thinker.

ALL-IN-ONE

Complementarity : Harmonization

The sixth aurological process constitutes the unifying harmony of all diversities, polarities and antagonisms. It is the reconciling synthesis which balances all oppositions, so that they become All-in-One, grow into a single many-sided consonance. All-in-One is the formula that combines the numberless aspects of the Reality into what they truly are: complementary facets of a larger unity in which they find their congruence and accord.

The role of each Truth-movement is now clearly defined, and their collaboration in the fashioning of the Truth-mosaic emerges: All-in-All is the frame and scaffolding which sup-

ports, pervades and includes the various elements and systems; All-in-Many interrelates and arranges these constituents according to micro-, macro- and supracosmic laws and correspondencies; All-in-One synthesizes the different pieces of the Reality's giant puzzle in constellations of mutually complementary units, sets, fields, and hierarchies which ultimately become the one harmony that is all.

The dynamis *harmonization* manifests the equilibrium of all existence in which everything complements everything else. Harmonization constellates all beings and events and movements into syntropic configurations; it assigns to each component its true place and period in the Truth's multidimensional artwork—the ontos. Further, it reveals antagonistic structures and dynamics as distinctive but complementary aspects of the archetypes and paradigms of existence. And in problem-solving and the general thought-process it is used to go beyond one-sidedness and fragmentation towards a multiple view from many complementary angles. *Complementarity* is the natural outcome of harmonization, for when everything is given its right position in the entirety, the outcome is evidently a symbiosis, in which the often antagonistic roles of the many actors in the play of the One complement themselves mutually.

All-in-One is implemented by becoming aware that all seeming antagonisms and disharmonies complement each other in the Truth. They resolve themselves into perfect harmonies and rich syntheses when viewed from a sufficiently high and broad perspective—when transcended in a unifying dimension of perception and conception. This harmonization-process is realized through the following programme.

The fundamental truths and principles, the essential wisdom and knowledge which harmonize all polarities and antagonisms are sought for. Many-faceted, congruent constellations, systems, networks must be established in order to unify with such a higher dimension of awareness all that constitutes to our surface-mentality seemingly irreconcilable opposition and unbridgable division. The apparently incompatible elements of individual as well as universal being and becoming are in this manner meaningfully combined and revealed as complementarities. One of these basic truths is expressed in the mantra of Aurologic: That is the One, the All, the Many. This auromantra synthesizes the individual, universal and transcendent aspects of the Reality.

For the practical purposes of problem-solving, the All-in-One provides us with a flexible tool: the variable x-in-one structure, where x stands for the number of different elements in a given matter, of diverse sides in a task or case. According to the number of different aspects in a problem or phenomenon we have two-in-ones, three-in-ones, nine-in-ones (as in Aurologic), and so on. These x-in-ones present themselves in truth-thinking as complementary aspects of the solution to a problem. Each side has to be put in its right position and relation to the others. All together are viewed as mutual complementary parts which form the constellation of the All-in-One solution: thesis and antithesis are resolved into a higher synthesis; diverse conflicting elements reconciled into a vaster harmony. Overtly antagonistic phases are thus shown to be essentially cooperating constituents in a greater system or hierarchy. The false appearance of irreconcilable contradictions and clashes of forces disappears—these are unmasked as complementarities which constitute a necessity for the functioning of the whole.

Modern physics illustrates this in Bohr's Theory of Complementarity which states that the quantum of light, the photon, appears as both, as a particle and a wave—these two being complementary denotations, each equally true but applicable in different situations. Depending on our observational method, the photon apparently behaves like a wave or like a particle. However, the question is not to determine whether the photon is a wave or whether it constitutes a particle. Both states need to be harmonized by the right synthesis, which clarifies the conditions in which either state is relevant. At some future date, a larger synthesis might go further and lead to the discovery of the conditions in which both are pertinent simultaneously, or even integrate these three aspects into some other yet undiscovered phenomenon which provides the comprehensive solution. (This might even add new aspects besides the states of wave, of particle and of both together and so widen the field of complementarity.)

These x-in-ones also serve as a scheme to express related, but distinctive, aspects of structures and dynamics. The fundamental duality of being and becoming, the two-in-one, the archetypal trinity (three-in-one), the fourfold cosmic Mother (four-in-one) which unites in itself the original cosmic powers of Wisdom, Strength, Harmony, Perfection, illustrate such many-sided powers and patterns, All-in-Ones.

Earlier, in the second aurolological movement, One-in-All (note its symmetric relationship with the All-in-One, manifest in the designations of both), we explored the path which leads to the discovery of these archetypes: namely, communion's search for the common factors of all existence. The present sixth movement founds itself on this exploration of the common paradigms. It moves from this vantage-ground to the next stage in their clarification and application in mental dynamics. As shown above, first it embodies them through the structural scheme of x-in-ones. Then harmonization proceeds to relate each of the many individual phenomena, structures and dynamics, which exist and function within the cosmic play, to their underlying, original archetypes and their—immanent or presiding—motivating archepowers. Basic questions are posed here: What are the archetypes, the cosmic powers, the original patterns which are involved, each in its own special way, in the phenomenon under investigation? In what constellations and proportions (ratios to one another) do they coexist and cooperate in the constitution and development of the phenomenon? By proceeding in this way one harmonizes particular entities, events and movements with the cosmic and existential fundamentals involved in and containing all things. Also the clash of forces which pervades all life and thought and being is reconciled through the synthesizing medium of the *gestalten*.

For instance, in the yogic sciences a clash may occur between the path of *bhakti*, of love and worship, and the path of knowledge, *jnana*. The bhakta finds the knowledge of the jnani dry, and inversely the latter tends to regard the former's worship as blind. It is clear that bhakti corresponds to the aspect of Harmony and jnana to the aspect of Wisdom of the aforementioned Cosmic Mother, the shakti. Both present themselves hence as necessary complementarities in the cosmic play, as two limbs growing from the same body. Devotion and knowledge are synthesized in this manner and form a symbiosis: adoration and love are enriched and ideally lead to knowledge of the worshipped; and for knowledge to become

integral, it needs to embrace the experiences of sweetness and result in worship—the more That is known, the more That is loved and adored. Behind the masks of such apparently different paths of yoga, to see the face of the one Cosmic Mother gives us the harmonizing key.

Another outcome of this aspect of harmonization is that the complex, multidimensional artwork of existence with its numberless mosaic-stones is focused through the archetypal lens of the general patterns and large lines. This perspective reveals the simplicity which underlies and is involved in the complexities of existence. Inversely it shows how the original simplicity had developed the multiform network of combinations and self-multiplications of which the cosmic play consists.

The following material example illustrates this. All the innumerable forms and configurations of matter can be reduced to the common denominator of the ninety-two natural elements and a few other manmade ones, or even of a few particles/waves on the atomic and nuclear level, and further, in the formula $E=mc^2$ to the single phenomenon of material energy. It is scientifically possible to trace the energy, waves, particles, elements and their constellations and movements in a material object (leaving aside the apparent wave/particle paradox for the scientific discoveries of the future).

The same process on an integral scale which embraces all aspects and dimensions of Reality results then in the unravelling toward a similar core of simplicity within the stupendously complex network of all existence. The riddles of Reality could thus be solved, and the revealed secrets of being used as a base for consciousness-force engineering as the next scientific breakthrough after atomic, chemical and genetic engineering.

As a first nascent step in this direction, it is worthwhile to mention that today it is not only the physical and life sciences which have penetrated some archetypal structures within their domain. Psychology follows in their footsteps with first, tentative gropings. J. P. Guilford's *Structure of the Intellect*, and Henry A. Murray's scheme of mental and psychological components, which can be combined in the same way as chemical elements, appear as a promising beginning, opening vistas for future researches.¹⁹ Noam Chomsky's archetypal language structure is another pointer in this direction. By interrelating the results of these physical, vital, and mental domains with the paradigms of the occult and spiritual sciences (e.g., the *chakras* of yogic psychology, the cosmic gods (= powers) of ancient traditions, the astrological zodiac in its esoteric significance, etc.) through the interdisciplinary and interdimensional approach outlined in the preceeding aurological movement, All-in-Many, still further, once invisible doors can be opened: the unknown, mystic realms of eternity and infinity could become the field of exploration for a holistic science.

A further implementation-process completes the development of the logical framework which has been outlined in the preceeding movements, All-in-All and All-in-Many. It serves here to express through the x-in-one structure any specific truth-relation which might correspond to a given situation. From the All-in-All's rich stock of aurological alternatives, one can

19. See the respective chapters of both of these prominent American psychologists in: Harold A. Anderson, ed., *Creativity and Its Cultivation* (New York: Harper & Brothers, 1959).

draw, by means of the All-in-Many's truth-relation, any number of alternatives which best suit the particular purpose. The All-in-One embodies then such a logical framework through the variable x-in-one structure. It gives us x-in-one logics: a one-in-one logic, a two-in-one logic, and so on, ad infinitum.

For instance, an exclusive monism, which stresses only the transcendent oneness of existence in which all multiplicity vanishes, bases itself on a one-in-one logic. The binary logic of the computer would be an example of a two-in-one logic. The either-or-both of the rational mind is a three-in-one logic. A stone is either wet or dry, or else it is both simultaneously: part of it is wet and part is dry; or, if we include the time factor, then the stone can also bear both attributes: at times it is wet, at others it is dry. The same example can be expanded as an illustration of a four-in-one logic of either-or-both-neither which characterizes a more developed intelligence (as in contemporary science): the stone can also be said to be neither wet nor dry, if it is regarded on a subatomic level, where it presents itself as an infinitesimal "solar system" of particles which cannot be characterized by these attributes; or it may even appear as a field of waves, or it can be equated to energy itself, as in the Einsteinian formula. A still higher evolved intelligence would operate with a five-in-one logic, by relating matter and energy to consciousness: for instance in a certain dimension of consciousness, one can perceive the stone to be simultaneously wet and not dry, wet and dry, dry and not wet, all these together and neither of these. Some of the sayings of Zen masters, yogis, mystics, rishis, that strike the reason as absurd or unfathomable, seem to be the result of such a higher evolved consciousness. However, our twentieth century scientific awareness would be as mysterious and crazy for the less developed mind in the past, when it declares, for instance, that all that the senses perceive is pure illusion, that a piece of iron is not a solid, static, homogeneous object, but for the most part empty space in which all sorts of things move around. A six-in-one logic could then further relate matter, energy and consciousness to bliss, and so on.

In short the operations of the One-in-All:

The harmonization of all polarities and oppositions in fundamental syntheses and encompassing networks where all antagonisms are fitted together and revealed as complementarities.

The application of the variable x-in-one structure as a plastic tool in problem-solving for the arrangement of the different sides of a problem and its alternative solutions as complementary aspects in an encompassing holisitic solution.

The use of this structure as a medium to focus and express the different aspects of many-sided powers, patterns and archetypes; to unravel in individual phenomena their underlying archetypes and presiding arche-powers; to explore the constellations and the ratios to one another in which they coexist and cooperate in the phenomenon.

The application of the x-in-one scheme as a flexible logical framework, of x-in-one logic which adapts itself to each particular case and task through the variation of the number of logical alternatives to a problem.

[To be concluded in the issue of November 1976]

'LET PURPOSE GUIDE''

Alice Bostock

This is the true joy in life: the being used for a purpose recognised by yourself as a mighty one . . . being a force of nature instead of a feverish little clod.

George Bernard Shaw

The future ought to see a much greater emphasis on purpose, both in individual lives and in the general sweep of world activities, whether these be concerned with service, ethics, aesthetics, town planning, politics, economics, education, or any other.

There have been, of course, great individuals throughout history who have concerned themselves with Divine Purpose, but, generally speaking, religions, philosophies and sciences have not given priority to discovering this Purpose. Over past history, for instance, religion has been chiefly concerned with teaching the value of love and wisdom, and the individual has thought of religion as imbuing him with a devotional attitude. Love of course will always be of the greatest value but in the future the attitude must be rather different. To love must be added understanding of the Divine Will and Purpose and the effort to cooperate with the Divine Plan. As Bernard Shaw has said, this will bring a

A British writer, Alice Bostock is closely associated with World Goodwill of London. This organisation is working toward right human relations as an activity of the Lucis Trust. Ms. Bostock has in the past contributed several articles to World Union.

"true joy in life" and this joy should be a characteristic of "the next future".

Much study and research must go into this subject. In order to understand the Divine Purpose, the Divine Plan must be traced through the past of this world. Only then will we be able to project the future and understand what we should now be doing in order to work along the right lines. We do not presume to have done this necessary research here, but we offer a few ideas to stimulate further thought.

According to legend there was a very progressive civilisation millions of years ago when primitive man was guided by a Hierarchy of spiritual beings, but towards the close of the Atlantean Age there was a great battle between the dark forces and the forces of Light which ended in the great flood which destroyed this civilisation. The Hierarchy then withdrew so that man should learn to be independent and progress by his own powers. Mankind was thus taught to become adult and act of its own free will.

Since the flood there have been many civilisations which have developed fine cultures but eventually have faded away, and empires which have risen and fallen. Aldous Huxley in *Brave New World* makes a discerning comment on these civilisations: "universal

states show a strong tendency to behave as though they were ends in themselves, whereas in truth they represent a phase in a process of social disintegration and, if they have any significance beyond that, can only have it in virtue of being a means to some end that is outside and beyond them!" While E. Gilson has noted that "The citizen of a universal state . . . regard[s] it as the Promised Land—the goal of all human endeavour." And Arnold Toynbee has said "the one shepherd whose oecumenical monarchy makes one fold for all mankind appeals to one of the Human Soul's deepest longings", while Dostoyevski has pointed out that "the craving for universal unity is the third and last anguish of men".

Arnold Toynbee has written much on the subject of universal states in his *Study of History* (especially in volume VI). He considers that "universal states came into existence in order to put a stop to wars and to substitute cooperation for bloodshed". Whereas E. Gibbon in *The History of the Decline and Fall of the Roman Empire* sees history as being "little more than the register of the crimes, follies and misfortunes of Mankind", Arnold Toynbee sees that, "The meaning behind the facts of History towards which the poetry in the facts is leading us is a revelation of God and a hope of communion with Him" (volume X). But we have to realise that these two historians started their work with different viewpoints. Arnold Toynbee says the reason he studied history was because "that an historian, like anyone else who has had the happiness of having an aim in life, has found his vocation in a call from God to 'feel after Him and find Him'". A balancing view is expressed by F. M. Cornford in *Thucydides Mythistoricus*: "we require a theory of human motives which will allow of our conceiving them, simultaneously, both as supernatural causes

coming from without and also as integral parts in the working of the agent's mind".

If we bear in mind that it is God's Will that we have free will we can see that God is working through those who are open to His guidance while it is also God's Will that man should develop his own understanding. This was pointed out by Desmond Tarrant in his article on "The Mysticism of Theodore Dreiser" in the March 1976 issue of *World Union* when he said, "His cycle of development illustrates one of Arnold Toynbee's universal cycles of development as the species slowly and painfully grows up . . . 'faith' being replaced scientifically by 'understanding'."

To pursue this idea of the craving for universal unity we must pass from the period of empires and dictatorially imposed unity to note that if these attempts at unity were to combat militancy they finalised in the League of Nations and the United Nations. Bringing this thought up to the present day we can note the universal nature of the specialised agencies of the United Nations and the present attempt to introduce the "new international economic order". As E. Gilson noted, this desire for a universal state is regarded by many as "the Promised Land" and "the goal of all human endeavour". To those of us who believe in a Divine Purpose it is a development which seems to indicate not only a human goal but also part of the Divine Plan.

If we are surveying world history and the influence of God on the physical plane then we must try to discern the influence of religions. As we have been considering universal states and empires and have concluded that man has been developing through these empires, let us try to work out the relationship between religion and these empires. First let us quote from a sermon preached by Pope Leo the Great about the Roman Empire.

He said, "It was thoroughly consonant with the divine plan of action that many kingdoms should be confederated in a single empire and that the evangelisation of all Mankind should find itself able to make an unimpeded and rapid progress through the ranks of peoples held together under the rule of a single polity." Sir J. G. Frazer in *The Golden Bough* gives his belief that "the spread of Oriental religions which inculcated the communion of the soul with God and its eternal salvation as the only objects worth living for" had the result that "the saint and the recluse replaced the old ideal of the patriot and the hero, forgetful of self as the highest ideal of humanity" and thus led to the break-up of the empire. Arnold Toynbee does not agree with this view, saying, "In seeking God, Man is performing a social act . . . the spiritual progress of individual souls in this life will in fact bring with it much more social progress than could be attained in any other way". He discusses this at great length (volume VII) and concludes: "It looks as if the spirit of the higher religions so far from being a social cancer, were the bread of social, as well as spiritual life." The answer perhaps is that we must beware both of the authoritarian, institutional and ultraconservative influence of a religion as well as the self-centred mystical aspects of yoga, but at the same time be aware of the benefits to human progress when it is realised that service and responsibility should go hand in hand with worship and meditation.

Besides this desire for unification, what other developments can we see which would appear to indicate a Divine Purpose? and what should they lead to in the next future? Many must work on this subject but we suggest a few ideas for consideration. Primitive peoples acted mainly by instinct but the gradual spread of the idea of the necessity

for education has meant that instinct has to a great extent been replaced by the use of the intellect. But man has not only a brain and emotions, he also has a higher mind and soul. May it not be that in the future, spiritual intuition, which has been the inspiration of our great leaders and prophets, may be as much prized as the intellect and will receive increased attention, and be valued as of higher import than instinct and intellect? Already the less orthodox religions and philosophies are teaching how this intuition may be developed through right forms of meditation.

Another very evident development has been the recognition of the importance of the group—in fact, group consciousness. Whereas at one time progress was through individual leadership, for the last four hundred years it has been group units who have led the way in all spheres of life, especially socially, in humanitarian reforms and in science and economics. According to the Alice Bailey teaching, the spiritual Hierarchy working from above inaugurated this group development in the year 1500 A.D., though leaving man the free will to develop these groups for good or for evil. Again, according to this teaching, at the beginning of twentieth century it was through spiritual instigation that an all-embracing spiritually minded group called "The New Group of World Servers" was formed. This group works esoterically with souls on the prayer level. The group is composed of all races and of those serving in all spheres of life, and works entirely subjectively and without recognition behind the scenes. As a World Goodwill spokesman has phrased it, "Thus a vast powerhouse and station of light has been formed. It is a diffused and widespread light and its channels are to be found all over the world in almost every group, in every country and in every major city. Politically, it is the

seed which has the power to transform personality groups into soul-infused groups; it is that which can provide the balance and love-wisdom which will offset the ancient tendencies to materialism and motivation for selfish group interests. It also means that there is a subjective relationship which links groups and countries, and which is finding its way into objectivity today through international relationships."

The growth in the extent of international relationships is, of course, another development through the ages. This growth has naturally increased at a rapid pace since the development of communications of all sorts, which have brought people all over the world into contact. As communication grows, understanding grows. This is surely the Divine objective, disrupted of course by conflicts, yet clearly to be seen. If the Kingdom of God is to be established on Earth, these relationships must grow and be characterised by goodwill and a spirit of sharing and cooperation. This idea of sharing is obviously making some headway in the economic world as the poverty and distress of the poorer nations becomes better known and better appreciated. As Ervin Laszlo wrote in his interesting article, "Goals for a Global Society", in the January issue of *World Union*: "in social humanism we move from the posture of coexistence to that of interexistence".

All these developments could be included in the general idea that part of the Divine Plan is the raising of the level of consciousness of mankind. Anthony Brooke in *Towards Human Unity* gives a good summary of the situation when he says "eventhough we cannot know the whole of the divine design and purpose, we are at least offered the possibility of discovering it in part and of realising that it has to do with the raising of earth man's con-

sciousness and the quality of his living, and particularly with his more widespread awakening to a 'greater understanding and recognition of his own true identity' . . . the spreading conscious self-identification of an ever increasing number of individuals as true sons and daughters—expressions of God . . . a divine transformation or using Pierre Teilhard de Chardin's graphic term, *the divinisation of the earth*. Humanity in fact is now taking responsibility consciously and joyously for bringing this transformation about . . . acting both individually and corporately as Christ . . . the Second Coming . . . (not to deny that Christ may also reappear . . . in a single form)."

We hope that a consideration of how the Divine Plan and Purpose has been working itself out through history may help us to know how we can best cooperate with that Plan in the future. There are many groups who are looking forward to a great spiritual revival in "the new age" ahead of us. In a talk given in New York by Mary Bailey, we have been told that there are "Great Forces, under spiritual leadership who are standing ready to precipitate themselves into this human world of chaos, confusion, aspiration and bewilderment. . . . It will not be easy. The spiritual energies which will be released will inevitably evoke opposition. Selfishness and hate, with the secondary effects of greed, cruelty and nationalism, are not dead nor will they die for a long time to come. But these conditions must be ignored and the new group of world servers and the men and women of goodwill must work together for an enlightened education, for a cooperative economic life, for right human relations in all departments of human experience, for clean political activity, for disinterested service, and for a world religion which will restore Christ to His rightful place in the hearts of men which will take

the pomp, the materialism and the politics out of the Churches, and which will unify the spiritual intentions of all the religions to be found in both hemispheres. This is a vast programme, but the numbers of enlightened men and women is also very great, and the power at their disposal ensures the ultimate triumph of their spiritual idealism." To help in this task we must realise that Christ and His disciples are always standing by ready to help those who invoke their aid. Mary Bailey closed her talk by saying, "A new chapter in the great book of spiritual living is about to be written, a new expansion of consciousness is an immanent happening; a fresh recognition

of divine attentiveness is now possible to humanity."

In order to fulfil the Divine Purpose there must be a number of men and women trained through meditation to receive spiritual guidance. There is now an ever increasing number who are learning the technique of using the mind to receive inspiration, so it looks as if the future understanding of Purpose and the fulfilment of that Purpose in daily living and the accompanying "true joy in life" is becoming a real possibility.

The following Great Invocation is increasingly being used throughout the world:

From the point of Light within the Mind of God
Let light stream forth into the minds of men.
Let Light descend on Earth.

From the point of Love within the Heart of God
Let love stream forth into the hearts of men.
May Christ return to Earth.

From the centre where the Will of God is known
Let purpose guide the little wills of men—
The purpose which the Masters know and serve.

From then centre which we call the race of men
Let the Plan of Love and Light work out
And may it seal the door where evil dwells.

Let Light and Love and Power restore the Plan on Earth.

It is said that when Christ returns He will reveal that love is the quality and meaning of life itself and the implementer of divine Pur-

pose. "Let purpose guide the little wills of men."

REVIEW

Psychiatry and Mysticism, edited by *Stanley R. Dean, M. D.* Chicago: Nelson-Hall, 1975. 422 pages, \$ 15.

This work is the result of a continuing interdisciplinary project to validate in Western scientific terms psychic phenomena and mystical experience. Growing out of three panel-symposia of the American Psychiatric Association, the discussion covers a wide field: meta-psychiatry, mysticism, ESP, occultism, telepathy, hypnotism, meditational techniques, healing, states of consciousness and allied topics. There is a sustained effort in all areas to find a common ground of meeting, and the conclusions are generally in consonance with the spirit of the day, synthetic and assimilative.

Dr. Stanley Dean, the editor, Dr. Elmer Green, Dr. J. B. Rhine, Dr. Julian Silverman, to mention only a few of the eminent contributors, bring a scientific approach to the present and past traditions of religion, mysticism and occultism and assess their relevance to the demands of medicine and sociology in the context of the age. There is a general recognition that the methods thus far developed by science for the exploration of the phenomenon of consciousness are far from adequate and greater sophistication is necessary. It is unfortunate that the knowledge provided by yoga has not been sufficiently regarded and utilised. There is only a superficial study evidenced in some of the papers of certain popular brands of meditation. Yoga therapy is a science that should be developed through modern means of research and application. A deeper study of the Yoga of Patanjali and the techniques of *pranayama* for bringing about "altered states of consciousness" is called for, as also of the relatively new and integral methods of yoga for growth into higher levels of consciousness.

M. P. Pandit

FOCUS

THE WORLD UNION MOVEMENT

When we have to work collectively, it is always better to insist, in our thoughts, feelings and actions, on the points of agreement rather than on the points of divergence.

We must give importance to the things that unite and ignore, as much as possible, those that separate.

— the Mother

Executive Committee

A special meeting of the executive committee of World Union was held in Pondicherry on 14 August 1976. A well attended meeting, it began with silent meditation.

Welcoming the members, Sri M. P. Pandit, chairman, said:

"Before we begin the agenda before us, I would like to offer a few preliminary observations to help make clear how we view things that are happening around us. Many of you are aware of the general agreement among scientists, social thinkers, and those who believe in spiritual values, that there is a new awareness, a new consciousness which is slowly making its way into all the fields of life. Particularly during the last few years, this awareness has been making itself felt. And one of the direct results has been the working of what may be called the Truth-Force, a power of Truth working all over the world to bring out the truth of things and expose all falsity. This force has been gathering strength, and the first astounding result was Watergate. Watergate on the scale that it took place—especially remembering its small beginnings—would have been unthinkable ten years ago. After Watergate there have been reverberations, minor Watergates in some countries of Europe and the East. Just when the last reactions of these Watergates are dying down, there is now the Lockheed scandal. We have seen great heads roll, crowns topple, and I can assure you that more is in store. If things have not been equally spectacular in India it is because of certain conditions, certain forces that are operating. Suffice it to say that conditions in India today are nearing the end of a phase, and before long we should see the opening of a new phase which makes it imperative for organisations like ours to consider their responsibilities very seriously.

"I am asked whenever new friends meet me or wherever I go: What exactly is World Union doing? If I tell them that we meet regularly, hold triennial conferences, promote seminars, conduct a journal, they are not very impressed, for they feel that this is pretty much

what other organisations are doing. They ask :What exactly is your contribution to the progress towards world union? If I say that we are trying to create a climate for the acceptance of this ideal, they reply that the climate has been present for some time, only people are not sincere in working out what they believe. So here is a challenge that every organisation believing in world union or human unity has to meet. We have in our previous meetings and conferences framed resolutions, put forward workable programmes, selected individuals who would look to following them up—but we are where we were. So I suggest that in this meeting we consider some project, even if it is a small one, which would fix our resolution to achieve world unity in some practical, tangible form. Let us not propose projects which are clearly outside our capabilities. Within our means and with what could be made available to us, we should start some kind of pilot project in whatever field we feel competent—and make a beginning. That will be our earnest to the country, showing that we are serious.

“I can only see two places where we could attempt this in India. Admittedly Bangalore is the place which has been most actively organised and is ideal from all points of view for the launching of an experiment. The next is, after the advent of Mr. Samar Basu and his colleagues, Calcutta. Bangalore is more stable politically than Calcutta, however. We should request the members from Bangalore to consider this possibility seriously and propose what they can do towards floating a pilot project in the course of a year or so—so that we make that beginning. The subject that is very much in the air and in which the members from Bangalore are very much interested is the one of national integration. Very well. Let that be the base, and let it be the channel through which we enter the national stream of life. What we are to do, in what way we can start, I reserve for Mr. Govinda Rao to elaborate.

“After making these observations and submissions, I wish to draw your attention to the fact that this is the last executive meeting before the triennial conference in January, central to which will be a seminar on The Next Future. You will be happy to note that to prepare for this gathering—to which a number of leaders in the humanities and social sciences are coming to participate from the West, particularly from the United States—we have started a study-group which meets weekly and discusses the questions, the possibilities, and the actualities of the next future, so as to be ready to conduct a meaningful seminar.

“We also have in January new elections for the office-bearers of World Union. And I solicit your support to my proposal that for the next term we should have Mr. A. B. Patel serve as the chairman of World Union. It is for him to choose his office-bearers. He has been reluctant to accept that office, but I know you are all one with me in saying that it is time that he formally accepts the status of the head of the institution, which he always is in our eyes.”

Several matters arising out of the minutes were discussed, during the course of which Rohit Mehta's draft on education and comments on it were considered. The discussion on this subject was quite long and involved numerous technical points. The following points emerged out of the discussions.

1. Since a main need in education is truly qualified teachers, World Union should collaborate in bringing teachers together to discuss educational concerns and opportunities.
2. World Union should support an experimental project in Auroville which would provide a

testing ground for all the points raised in the discussions, which could grow into a teacher's training site, and which would be a project communicated to World Union centres for their passive or active participation (e.g., young teachers coming to Auroville for training). This proposal was accepted.

3. World Union should link the concept of mankind with a reform of curriculum programmes.

4. World Union should form a committee for contributions on education to *World Union* to expose and solve problems.

5. World Union should form a committee to continue the work of education taken up in the draft paper. This committee would, in particular, integrate all the suggestions made on the draft paper and produce the final report. This proposal was accepted, and the chairman and general secretary were asked to form a committee.

Proposals to improve the working of World Union were put forward by Dr. H. S. Lakshminarayana. These proposals were recommended by the Bangalore centre. There were two main areas of concern: attracting new members, and facilitating the organisational working. After a lengthy discussion in which the committee proved hesitant regarding the implementation of the circulated proposals, it was decided to make these proposals available to World Union centres without any recommendation, so that each could decide according to its own situation what to do with them. An important point made by the chairman during a discussion that moved back and forth between the spiritual emphasis of World Union's work and the external emphasis (i.e., social, economic, educational, political) was that World Union's basis and essential work is spiritual though it is to be expressed on physical, emotional, and mental levels by each centre and person in the way and manner natural.

The third World Council, exceeding one hundred members, was constituted of representatives of World Union centres and some eminent persons for a term of six years beginning 1 September 1976.

A progress report of the 1977 triennial conference, *The Next Future*, was presented by Ronald Jorgensen. He reviewed new acceptances to seminar invitations since the June "Focus" report, referred to the core study-group in Pondicherry and the work done by it, and also gave general information about preparations now proceeding. It was added that the very fine response to seminar invitations suggested that World Union members would be able to observe seminar sessions of an unusually high level and that this conference would excel in educational value for all members. Further, it was noted that the seminar discussions would be likely to disclose insights regarding the future of many fields and work that should have a great influence on World Union policy to come. A request was added for all to seek out souvenir/conference volume advertisements in order to finance the conference, and Sri N. S. Rao of Bombay and Sri Samar Basu of Uttarpara agreed to make special efforts in that direction.

Under "any other business", the World Union India Centre made proposals to raise finances for its work which did not prove acceptable to the committee. Instead, for the next year, when the situation may be reviewed, Sri N. S. Rao of Bombay offered to contribute to the India Centre Rs. 150 per month, and Sri Rambhai N. Amin of Ahmedabad Rs. 101 per month.

N. S. Rao commented that World Union methods of unity, harmony, love, and identification were very successful in his business.

Proposals sent by Samar Basu and Prof. M. V. Ramachandran were referred to and the consensus was that each centre should be at liberty to adopt such methods and means and to undertake such projects as are suited to the local conditions and as would serve the aims of World Union. No uniformity was desirable in a movement based on a spiritual foundation.

Conference Reception Committee

The enrolment of members for a reception committee for the fifth triennial conference has commenced and every member of World Union who desires to join it is welcomed on payment of Rs. 500. The following are already enrolled:

- | | |
|---------------------------|-----------------------------------------|
| 1. Prof. Ambady Narayanan | 21 Perumal Koil St., Pondicherry 605001 |
| 2. A. B. Patel | World Union, Pondicherry 605002 |

Central Council

The second meeting of the central council of the World Union India Centre met at Bangalore on 17 August 1976 and discussed follow-up action in the light of replies so far received to the questionnaires they had issued. The meeting began under the chairmanship of Prof. N. S. Govinda Rao with a silent prayer. While welcoming the members, the chairman said that the philosophy for national integration at the moment is embodied in the collective effort of the millions constituting the nation and their collective spiritual thinking. There is not a single individual who can be regarded as the originator and propagator of the message of integration and unity. The movement for national integration is mainly spiritual in content and outlook. Spiritually based activities must enter the socio-economic fields for national well-being in order to make the masses realise the oneness of and in consciousness. Dr. T. Prasannasimha Rao presented a statement of progress which was approved. Dr. H. S. Lakshminarayana gave a brief review of more than thirty replies received in response to the questionnaires sent to World Union members and others. Sri Rohit Mehta observed that in the concept of India as a spiritual entity alone lies true integration. He suggested a fourfold strategy to be adopted for exploring methods to achieve national integration:

1. To enable people to discover unity by an appreciation of unity in the midst of diversity in all social, cultural and other activities.
2. The foundations of Indian culture must be emphasised through all means and media of mass communication.
3. To popularise folklore, songs, dramas and dances of all countries in the world and the regions of India in particular.
4. To draw attention to the saints and sages of India who have been great integrating forces and factors.

Discussion took place at some length on these suggestions in which Haneef Jawaid, P. V. Rajagopal, Samar Basu, Shreedeviben Metha, A. B. Patel, and Rohit Mehta participated.

Sri Samar Basu informed the council that the second national convention of the World

Union centres of India would be held in West Bengal in the second week of December 1978 for three days.

Trends Towards a New World Order

Under the auspices of the World Union India Centre and the Indian Institute of World Culture, a public meeting was held on 17 August 1976 at the premises of the Indian Institute of World Culture. Sri A. B. Patel spoke on "Trends Towards a New World Order", and answered questions. He emphasised that we are passing through a period when new creation and destruction are simultaneously taking place. World conditions are very different from conditions of any other period of human history, and these are shaping a new world order, even though several elements of the old world order tend to persist. He traced briefly how world events disclose that there is a slow but steady growth of the spirit of international co-operation, while the tendency for confrontation and conflict is diminishing. That evening the World Union India Centre arranged a get-together dinner at the Woodlands Hotel where many friends connected with the work of World Union India Centre had the opportunity to meet each other.

Bangalore World Union Centre

Sri P. V. Rajagopal addressed a meeting, convened by the World Union Bangalore Centre on 1 August 1976, on the subject, "Yoga and World Union". He emphasised that yoga is a scientific means for attaining not only perfect health, an efficient body, and a peaceful and balanced mind and emotional nature, but also to attain to universal love and a consciousness established in unity with truth. If the World Union movement is to awaken to this realisation and establish unity, yoga is one of the important means to achieve it.

The Bangalore World Union Centre, the Humanist Organisation, the Institute of Gandhian Studies, Bangalore University, University Women Teachers' Association, and the Forum of International Affairs, all of Bangalore, organised a seminar at the Senate Hall, Bangalore University, on 20 and 21 August 1976 with four sections: Humanism and Religion, Humanism and Professions, Humanism and Literature, and Humanism and Mass Communication. Professional people and many eminent scholars in the field of religion, literature, mass communication and journalism participated. Among them were: Dr. H. Narasimhayya, vice-chancellor of the University of Bangalore; Dr. D. C. Pavte, ex-governor of Punjab and former vice-chancellor of the Karnataka University; Dr. V. K. Gokak, former vice-chancellor of the University of Bangalore; Sri Nittoor Srinivasa Rao, former judge of the High Court of Bangalore and former vigilance commissioner, Government of India. The seminar was attended by the elite of the city and about 150 student delegates drawn from the various colleges of Bangalore. The prominent feature of the seminar was the question and answer session which brought out the latent talent and inherent spirit of unity among the college youth.

A symposium on National Integration was held on the eve of World Union Day, 20 August 1976, in Bangalore. Among the participant speakers were: Sri K. G. Katwey, Sri B. Krishnamurti, Dr. M. A. Hafeez and Prof. M. G. Narsimhaswamy; Sri Thandaweswara acted as moderator. The symposium was held at the auditorium of R. V. Teachers' College,

Jayanagar, Bangalore. Sri Katwey emphasised that human understanding is necessary for achieving integration at the individual, national or international levels. Sri Krishnamurti put forward the need to practice integration at personal and national levels, and not merely by vociferous lectures. Dr. M. A. Hafeez stated that integration can never be achieved either at the personal or national level with the existence of millions of undernourished or impoverished men and women. Professor Narasimhaswamy laid emphasis on the dignity of the individual and said that the new juridical aspect promotes the feeling that we all belong to one species and all deserve to live together. The other speakers on the occasion were Sri M. K. Ramasham, public relations officer, the Humanist Organisation; Sri Bhaskar, lecturer at R. V. College; Prof. Jean A. Carpenter and Conie Carpenter of Barcelona. The moderator summed up the symposium by observing that the World Union movement should be based on a cultural consciousness with special emphasis on a framework of values, while seeking a remedy to economic disparity by collective economic uplift of the underprivileged. For arranging this symposium, World Union Bangalore Centre had issued a circular dated 1 August 1976, and a background note giving information about World Union and the participants.

Surendra Mohan Ghose

With a full heart we announce that Sri Surendra Mohan Ghose, a veteran Congress worker, freedom fighter, and a well-known patriot of India, passed away at New Delhi on 7 September 1976. His body was flown to Calcutta and cremated there. Many prominent Indians, including the prime minister, paid rich tributes to his services to India. On the guidance received from the Mother in her own handwriting on 23 April 1960, when the first election of the office-bearers of World Union took place, he was elected president. He continued in that position until 20 August 1964 when the Mother graciously consented to be the president, and Sri Surendra Mohan Ghose was elected chairman. This position he voluntarily renounced in December 1973, but continued as a member of the executive committee until he passed away. He was a life member of World Union and organised the World Union Delhi Centre of which he was the president from its inception till his passing. He took keen interest in the progress of the World Union movement and we will now miss his valuable advice and services. He was a devotee of Sri Aurobindo and the Mother, and carried on all his work as an offering to the Divine.

ORGANISATIONAL ACTIVITY

World Union Centres

Butwal In addition to its weekly meetings, the Butwal centre held a programme on August 15, 1976 to celebrate Independence Day as well as Sri Aurobindo's birthday. The programme included participation in sports events, meditation, homage to Sri Aurobindo and a brief talk by the president, Sri S. K. Rattan—who expressed his gratitude to the pioneers of human unity—and an evening get-together and cultural programme.

On 20 August 1976, World Union Day was celebrated. The programme included

meditation and a talk by the president on the significance of World Union Day and *The Ideal of Human Unity*. He also read from the *Mother's Prayers and Meditations*.

Hearing the news on September 7th of the passing of Sri Surendra Mohan Ghose, the Butwal centre called a special condolence meeting that evening. After an opening meditation, the centre's president paid his most respectful homage to the departed soul, saying: "May Dadaji ever remain guiding us to carry out his mission of Truth, Peace and Unity." The meeting then closed with a brief meditation.

Pondicherry In collaboration with the Government Law College, Pondicherry, the Pondicherry centre celebrated World Union Day on 20 August and organised an inter-school and inter-collegiate elocution contest on the topic, "As Is the Person, So Is the Nation". It was held at the Government Law College premises. Ten higher secondary schools and seven colleges participated in the contest. The prize winners among the high school students were: (1) Kumari Lakshmi Krishna of Central School; (2) Kumari Kamakshi of Immaculate Heart of Mary School and (3) Master Ravi Raju Gopal of Central School. (1) Mr. B. Das Gupta of Jipmer, (2) Miss K. Latha of Government Law College, and (3) Miss Varalatchoumi of Bharatidasan Government College for Women, were the winners among the college students. Miss A. P. Sharada, professor of English, Jipmer, distributed the prizes. Mr. George Moses was the announcer; Sri Rajaraman proposed a vote of thanks. A panel discussion on "National Integration and World Unity" followed. Sri Madhav Pandit, Mr. Ronald Jorgensen, and Miss A. P. Sharada were the speakers, and Dr. N. R. Madhava Menon, principal of the Law College, was the moderator.

In the evening at the Ashram theatre, Salem S. Jayalakshmi, the well-known classical singer of Madras, and her party gave a recital of devotional songs in Sanskrit, Tamil, Kannada and Hindi. Sri Mohan of the Sri Aurobindo Ashram had earlier sung songs of invocation to Sri Aurobindo and the Mother.

The newly formed Youth Literary and Cultural Club, under the guidance of Mr. George Moses (chairman, Pondicherry World Union Centre), and the local World Union centre have decided to affiliate and to assist each other in mutually-undertaken projects. One such project is a "book bank". Members and friends of World Union in India and abroad are requested to send books, magazines, pamphlets, travel brochures, etc., which will be presented by the Pondicherry centre to selected schools. The address to contact is: Mr. George Moses, Chairman, World Union Pondicherry Centre, 3 Vivekananda Nagar, Pondicherry 605005.

Konnagar The centre celebrated World Union Day on 20 August in Swami Dhyananda Ashram with the active participation of women devotees of Sri Aurobindo and the Mother. They staged a dance drama, "Keno Ai Ma", by Sri Samar Bose, depicting the role of Savitri in paving the way for the descent of the Divine Mother who is to usher in the next step of the spiritual evolution of man.

At the monthly meeting held at the same venue, Sri Samar Basu referred to The Next Future, the theme of the fifth triennial World Union conference, and spoke on "Sri Aurobindo on the Future Society". He concluded his talk by laying special stress on man's ultimate destiny: to acquire Superhumanity within his material existence and being.

Hyderabad The centre celebrated Sri Aurobindo's birthday on 15 August at Sri

Aurobindo Library Hall. Dr. Ramchandran, Dr. Nadkarni and others participated in the meditation.

On 20 August a public meeting was held under the chairmanship of Sri Venkatramiah. Dr. P. N. Bindu wrote a paper, entitled "One World", for the occasion and Sri Kasinath read it. Dr. Bindu explained the objectives of World Union and explained its significance. Dr. V. Suryanarayana Rao, a staunch advocate of the Sarvodaya movement, spoke on the need to evolve a socio-economic order for the upliftment of the common man. Sri Kasinath, the author of *Scientific Vedantha*, emphasised the need for the study of Vedanta in this age of science and technology.

Chaibasa The centre arranged special meetings on 15 and 20 August at the centre's premises to observe Sri Aurobindo's birthday and World Union Day respectively. Both the meetings were well attended. On the 15th, passages from the Mother's *Prayers and Meditations* were read, and on the 20th, the importance of World Union Day was discussed.

Calcutta The centre held its monthly meeting on 17 July 1976 with Sri L. N. Datta presiding. Sri Samar Basu, the main speaker of the day, gave a talk on the World Union movement. He referred to the relationship between the World Union movement and the *sadhana* outlined by Sri Aurobindo. He spoke at some length and sketched the evolution of the human race towards unity, pointing out that Sri Aurobindo's *Ideal of Human Unity* traces historically the progress made by humanity towards the realisation of unity, and ought to inspire World Union workers to work for this ideal. Those in the meeting applied their minds to several matters and then decided to celebrate the ensuing birthday of Sri Aurobindo on 15 August and World Union Day on 20 August at Sodepur along with other World Union centres in West Bengal. The progress for the registration of the World Union Cultural and Economic Council was mentioned. Those who intend to attend the fifth triennial World Union conference were asked to register their names as delegates at Pondicherry with the payment of Rs. 25.

Nanjangud The centre celebrated World Union Day on Sunday, 22 August. Sri B. Hanumantha Reddy, special land acquisition officer, Nanjangud, was the chief guest. He gave a talk on "National Integration of India", with Prof. K. S. Vishwanathan, presiding. It was a well attended meeting.

Uttarpara The centre celebrated Sri Aurobindo's birthday on the 15th at the Library Hall of Amarendra Vidyapith, Uttarpara. The 29th monthly meeting of the centre was held on 4 September when Sri Samar Basu spoke, elaborating the features of a subjective age which would be a step for mankind to reach a spiritual age. Before speaking on the subject, he had placed before the gathering his report of the meetings of the executive committee at Pondicherry and the central council at Bangalore. He also explained the significance of the subject, The Next Future, selected for the fifth triennial World Union conference. The meeting decided that the centre in collaboration with other centres would celebrate U. N. Day on 24 October 1976 at Jay Krishna Public Library, Uttarpara, when a symposium, on Loyalty to Family vis-a-vis Loyalty to Humanity, would be organised by students and youth-wing members.

Regional Centre of West Bengal The centre's first meeting on 20 June 1976 was held at the hall of Sri Aurobindo Bhavan, Calcutta, Sri S. N. Roy Choudhury presiding. This report

is rather late but, being the first meeting of the Regional Centre, it is advisable that the information is provided. After a few minutes of group concentration, Sri T. K. Sinha, the secretary of the Regional Centre, presented a report of the progress made. On the basis of the report, Sri Samiran Ghosh asked that prospects for opening new centres in each district of West Bengal be explored. It was decided that all World Union centres of West Bengal should meet at Sodepur on 22 August to observe World Union Day; that the second national convention of World Union Centres in India should be held in West Bengal in December 1978; and that a working cell of the Regional Centre consisting of Sri S. N. Choudhury, Dr. G. R. Mittra, and Sri Samar Basu be formed. Resolutions were also adopted on several important questions affecting the World Union movement, such as the holding of seminars at intervals of three months with the cooperation of all the centres of West Bengal. In pursuance of the resolution to celebrate World Union Day, the Regional Centre had issued a notice to all World Union centres in West Bengal on 25 July informing them that the celebration at Sodepur would take place on 22 August. We are awaiting the report of that seminar.

Khar World Union Day was celebrated on the 20th August at Sahakar Building, and Dr. Ushaben Mehta of Bombay University, Department of Politics and Sociology, spoke on "National Integration" and emphasised the need of it for the orderly progress of India. On 30 August, Sri Rohit Mehta gave a talk at Sahakar on the Integral Yoga of Sri Aurobindo and pointed out how it was a synthesis of yogic systems of the past.

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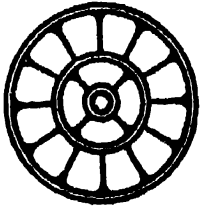
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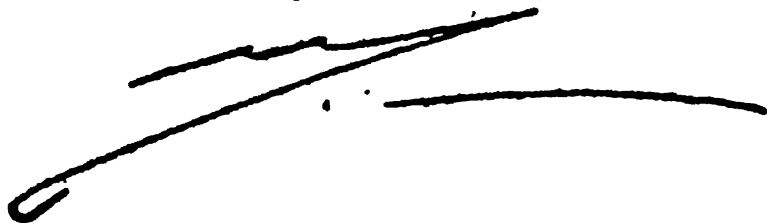
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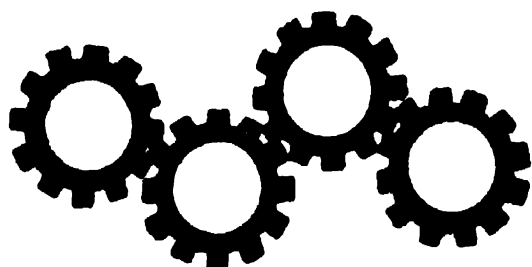
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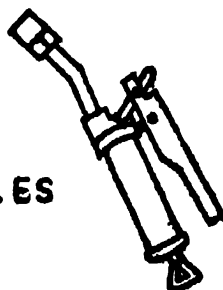
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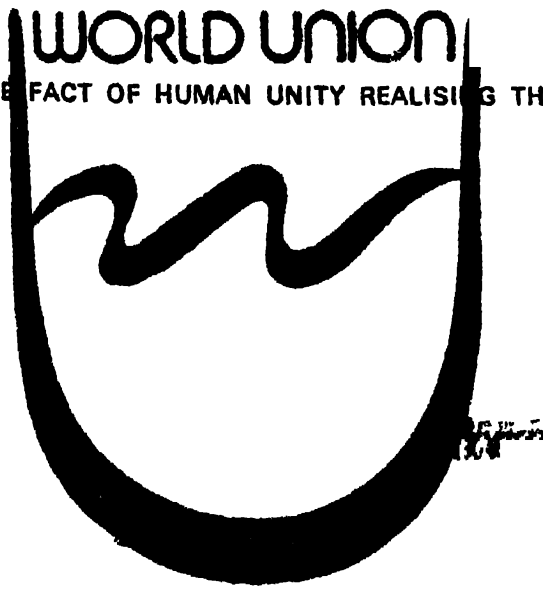
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EDITORIAL

Interspiritual Fellowship

It is an irony of the present state of things that it is easier to bring about a conference between conflicting politicians than it is to promote a meeting of spiritual leaders. Yet the latter should be easier and more natural, for the avowed object of all spiritual movements is to realise the oneness of all. But most representatives of most traditions are unable to meet with an open mind. Each is convinced—whether he proclaims it openly or not—that his is the highest truth and all should subscribe to it. This spiritual egoism has stood in the way of meaningful understanding among the various religious and spiritual movements that are current in the world.

How can this be remedied? By working for one religion, one spiritual ideology? That is impossible by the very nature of things. For the Truth, the Reality, is many-faceted and it reveals itself differently to different cultures and approaches, though with an underlying commonalty. Too, men are at different, varying stages of evolutionary development, and the starting point of each one, the achievable goal and the path thereto understandably differ. This is especially so in spiritual matters. It is common sense that this fundamental truth must be recognised by every spiritual tyro. Each must concede the truth of others. What is relevant and valid for me may not be so for my neighbour. But that does not mean I conflict with him, subtly or openly, and isolate myself from him. A spiritual outlook and consciousness demands that I meet those of different persuasions on the ground of a common divine origin and an ultimately common divine objective. An interspiritual fellowship is the first movement in this direction.

Quarrels and Spirituality

It is recorded that even in the days when the Buddha was living, discords and quarrels among his disciples were not unusual. It appears that once there was a bitter dispute between two sections of monks in the same monastery over a point of doctrine versus practice. Arguments led to abuse and abuse to blows. The elders could not prevail upon the members to return to normalcy, as they themselves were involved in the controversy. Word was sent to the Buddha who was camping some miles away. He came, he advised, but no one listened. He

had to return disappointed. Tempers were frayed and the air was fouled. When the laity who were economically supporting the community of monks came to know that even the presence of the Buddha had had no effect, they promptly stopped their supplies. And lo, within a couple of days, the quarrelling monks devised a conciliation and went in deputation to the Wise One in repentance.

It is no wonder that men differ and oppose each other in secular domains. But it is absurd if they do so under a spiritual canopy. They betray the very first principle of spiritual life when they forget or callously set aside the elementary duty of one seeker to another. Love may be far off. But an understanding or at least a readiness to understand another is the base and process of spiritual fellowship. One serves the ideal ill if one begins by warring with the next practitioner. One who does so swerves from the path at that very moment. The ego flourishes under the specious cover of spirituality.

M. P. P.

Notice to Sūbscribers: Instead of the normal December issue of *World Union*, all subscribers will receive the special conference/souvenir volume being published on the occasion of World Union International's fifth triennial conference, *The Next Future*. This journal will be released at the beginning of December and will reach subscribers at the regular time; the January issue will be published as usual.

CORRELATION BETWEEN COSMOLOGIES AND CULTURAL PATTERNS AMONG WHITE SPIRITUALISTS

Magoroh Maruyama

A. Introduction

Shamanism and spirit religion have been studied extensively in non-white cultures by white anthropologists, sociologists and missionaries. On the other hand, spiritualism—a corresponding phenomenon within white cultures—has not received a comparable attention from social scientists, even though it is as legitimate a subject of social science study as the spirit religions in so-called “primitive” cultures and therefore needs to be explored.

Moreover, there is a theoretical and methodological advantage which can be gained from the study of white spiritualists for the following reasons. In the case of the study of non-white cultures, often the researcher infers the logical and epistemological structure of the cultures from the study of their cosmology. However, in the case of white spiritualists, the cosmological structure and the epistemological and logical structure can be obtained from independent sources: the epistemological and logical structure can be inferred from the philosophy, ideology, patterns of social interaction and other explicit and implicit manifestations readily accessible to the researcher, while the spirit cosmology can be obtained directly from the mediums who are usually not philosophers, ideologists or psychologists. This separability makes it possible to test the hypothesis as to whether the structure of the spirit world which the spiritualists claim to have been communicated to them from the spirits correlates with the epistemological and logical structure of the spiritualists themselves.

This paper compares in detail two spirit cosmologies formulated by two European

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mediums belonging to two different cultures. The purpose of the comparison is to indicate the quality of details available in some cultures, to the degree that they can form the basis of detailed correlational analyses if similar details are available in a sufficient number of cultures.

Even though orthodox Christianity has developed elaborate theologies, the white spiritualists, most of whom consider themselves to be Christians, tend to shy away from theory-building, particularly the established mediums. The mediums consider that their task is to make their physical body available as a vehicle of "communication" from spirits with as little mental preconception, prejudice or restraint as possible. Furthermore, most mediums usually go into trance during the "communication" and do not recall what has been "communicated" through their own mouth. They later learn the contents of the "communication" from others present at the séance or in some cases from the taperecording. The participants of the séance who "communicate" with spirits through the mediums are usually motivated by specific personal purposes such as talking with their dead relatives or friends, and are little interested in theological or cosmological formulations. Therefore, even though there are many mediums in many white cultures, the extent of the availability of cosmological formulations in some cultures may be limited.

This author found two highly elaborate cosmologies by two established mediums in two different cultures: Stainton Moses (England, 1839-1892) and Johannes Greber (Germany, ca 1880-1940).

In the spirit world described by Stainton Moses (refs. 1, 2), the spirits do not claim to be omniscient. Their powers are limited by many factors. They can make progress or retrogression through various layers of the "spheres". Their social interaction is governed by congeniality rather than familial or vocational ties. They can allow for variations of cosmological interpretations among themselves, and advise the human to use human reason in his choice of acceptance or rejection of the validity of communication to him from spirits. They make team efforts to communicate with humans, seldom incarnate into human body, and consider the ultimate "god" to be an omnipotent influence rather than a personality.

On the other hand in the spirit world presented by Johannes Greber (ref. 3), spirits incarnate into human forms several times on their way from lower organisms to higher spirits, and are governed by a supreme "God" who is a personality and has a humanoid shape. The spirits seem to interact mainly in terms of their job assignments given by God, and possess or are being educated into the "absolute truth". One of the spirits was assigned to "communicate" with Greber with dogmatic authority and with an authoritarian tone.

In the following pages we will compare the details of the cosmologies of Stainton Moses (SM) and Johannes Greber (JG).

B. Details of the Cosmology of the Spirit World by Stainton Moses

1. The composition of the universe.

The universe consists of three groups of seven spheres each, a total of twenty-one spheres. These spheres are not locations but states. In terms of spatial locations they interpenetrate one another.

The highest seven spheres are the spheres of contemplation. The next seven spheres are the spheres of work and probation, and are called progressive spheres (2: p. 40). SM does not give a special name for the lowest seven spheres, but gives the following descriptions: "The earth sphere is the highest [the seventh] of the lowest seven spheres. "In the sixth sphere (one below the earth life) "dwell those who . . . have no aspiration beyond the body. . . . Such are gluttons, gamblers, misers" (2, p. 87). In the fifth sphere are "those who have still further debased and degraded their bodies" such as drunkards, and sensualists who have "ruined pure lives by their lusts" (2, p. 87). "Nothing but prayer can make them better and save them from sinking lower and lower" (2, p. 87). Below the fourth sphere are "the miserable, abandoned spirits who sink down deeper and deeper, who become unable to rise, and who gradually lose their personality" (2, p. 86). The spirits in the spheres of work, who communicated with SM, have never penetrated beyond the fourth sphere and do not know much about the conditions there.

Upon bodily death, the man's spirit enters the spheres of work and probation, where he may make progress or retrogression, and if he continues to make progress, he will eventually enter the spheres of contemplation. "The first three spheres [of work and probation] are near about your earth. They are filled thus: The first with those who, from many causes, are attracted to earth. Such are they who have made little progress in the earth sphere, not the wholly bad, but the vacillating, aimless souls who have frittered away their opportunities and made no use of them. Those, again, whom the affections and affinity for pursuits of their friends restrain from soaring, and who prefer to remain near the earth sphere, though they might progress. In addition, there are the imperfectly trained souls whose education is still young, and who are in course of elementary teaching; those who have been incarnated in imperfect bodies, and have to learn still what they should have learned on earth. Those, too, who have been prematurely withdrawn from earth, and from no fault of their own, have still to learn before they can progress" (2, p. 60). "Two or three stages after death, spirits lose much of what you regard as individuality and become more like influences" (2, p. 16). If the spirit continues to make progress, it will pass through spheres of purification and spheres of education, and when the material is entirely purged away, the spirit is fitted to enter into the spheres of contemplation. "Then we [the spirits who "communicated" with SM] lose sight of it" (2, p. 96).

The spirit which enters the spheres of contemplation loses much of its individuality. "It might be that individual existence would be forever merged in that great Center of Light" (2, p. 96).

2. The Emperor team.

The team of spirits which "communicated" with SM consisted of forty-nine spirits who made up seven circles of seven spirits each. The head of the team was Emperor, who came from the seventh sphere of work and probation. The team had the following organizational structure (2, pp. 11-13):

First circle:

Emperor: the head of the team.

Rector: deputy and lieutenant. Also in charge of the seventh circle.

Doctor (also called Teacher): to guide the medium's thoughts, influence his words, and direct his pen. Doctor also was in charge of the third and fourth circles.

Two guardians: to ward off and modify the baneful influences of earth (during the séance with the medium).

Two guardians: to ward off the evil influences of the spheres and the allurements of the lower spirits (during the séance).

Second circle:

Seven spirits devoted to *love*: charity, tenderness, pity, friendship, affection, etc.

Third circle:

Seven spirits taking care of *wisdom*: intuition, perception, reasoning, etc.

Fourth circle:

Seven spirits in charge of *knowledge*: caution, comparison, causality, etc.

Fifth circle:

Seven spirits in charge of art, science, culture, music, etc.

Sixth circle:

Seven spirits in charge of wit, humor, joyous conversation, etc.

Seventh circle:

Seven spirits in charge of physical manifestations in the séance. These are earth-bound spirits who are purifying and elevating themselves by means of their task in this circle.

The "communication" from the spirit world to SM are signed Imperator, Rector, Doctor, etc., but is a result of the teamwork of all forty-nine spirits. Imperator, who is too removed from the earth sphere, can no longer write, and has to depend on Doctor's writing and speaking through SM (1, p. 4).

During the task of "communication", the higher spirits can benefit the medium, and the medium can benefit the undeveloped spirits who have been prematurely withdrawn from earth and who did not finish their education on earth (2, p. 14).

3. The spirits urge humans to test the validity of the communication from various spirits.

Since the sender of a communication from the spirit world may be an uneducated spirit or an evil spirit as well as an enlightened spirit, the Imperator team urges humans to use the human reason as a criterion to check the validity of the contents of the communication. "Human Reason sways the final decision" (1, p. 52). "Blind faith can be no substitute for reasoning trust" (1, p. 52). "Reason is the ultimate judge" (1, p. 52). "Give no blind adherence to any teaching that is not commended by reason" (1, p. 57). "Set up no human standard of judgment other than that of right reason" (1, p. 57). "Beware how you submit to the guidance of unseen intelligences without ascertaining if they are what they pretend to be" (2, p. 18). "Many spirits, with the best intentions, communicate the most erroneous doctrines as they have not lost the theological fog gathered during earth-lives" (2, p. 38). "If a spirit ennobles you and leads you to a higher plane of intellectual, moral or spiritual

development, or elevates your affections, then follow it; but if it drags you down and leads you to that which is earthly, then flee such, for they are of the adversaries" (2, p. 38).

4. Spirits are neither omniscient nor omnipotent. They have many limitations. In many aspects spirits are less capable than humans, and higher spirits are less capable than lower spirits.

"Spirits speak according to the experience and knowledge. Some who are asked abstruse questions give replies according to the measure of their knowledge, and are in error" (1, p. 26). "The guardians [the spirits who guard a séance] retire affrighted from the presence [of spirits with inferior character]; they cannot breathe the atmosphere which surrounds it" (1, p. 27). "We higher spirits find it very difficult to find a medium through whom we can communicate, . . . and from their unwillingness to prolong their search for one, they will not risk the waste of time" (1, p. 12). (This implies that spirits do not have unlimited time at their disposal.) "The return to earth [in order to communicate to humans] is a great trial to me [a spirit]. In the atmosphere of earth I seem completely changed. The old habits of thought awaken, and I seem to breathe a grosser air" (2, p. 17). "Such spirits [from the higher spheres] would more frequently communicate if questions were not put to them about your world of which they are completely ignorant" (2, p. 24). "Unfortunately the lower powers can counterfeit almost everything we can produce" (2, p. 41). "The higher spirits can only exist for a short time in your atmosphere, and it is often difficult for us to approach you" (2, p. 43). "Matter has faded from our gaze, and when we return to the material plane, we see nothing of it. All we see is the spirit. We could not present ourselves for a photograph, but we might commission other spirits to present an image of us" (2, p. 45). "We are Intelligences of varying degrees of power and capacity and development" (2, p. 51). "I was delayed by a conference of spirits at which my presence was necessary" (2, p. 51). (Spirits are time-bound.) "We cannot teach where man will not be taught. The scanty interest that the higher revelations excite render it very difficult for even the most advanced Intelligences to make satisfactory communication with your world" (2, pp. 52-53). "A spirit may go on for ages honestly entertaining beliefs in themselves erroneous, though not pernicious" (2, p. 57). "When such a spirit is brought again within the atmosphere of earth, all its old opinions, which have been dormant, are quickened into new life and come forth as of old" (2, p. 57). "This is why dormant error, not yet purged away, frequently becomes vivified and energetic when a spirit mingles again with old associations" (2, p. 57). "Unprogressed spirits do teach in error much that you learned to know as error. They are but disembodied men, and share their fallacies" (2, p. 57). "The spirits who most frequently chose to communicate through mediums are not on any advanced plane of intelligence" (2, p. 57). "Those spirits who come to us [in spirit spheres] much encumbered with human theology are amongst the least progressive" (2, p. 57). "Many spirits, with the best intentions, communicate the most erroneous doctrines as they have not lost the theological fog gathered during earth-lives" (2, p. 38). "A large class of spirits progress slowly, and do not know that they are in error" (2, p. 58). "Ignorance and prejudice and speculative guesses prevail in the lower spheres with us as with you. Many deluders come bearing a mission from the adversaries, and such are not infrequently pious in their tone and orthodox in their words" (2, p. 58).

"Spirits cannot be expected to know all abstruse mysteries, and those who profess to do so give the best proof of their falsity" (2, p. 58). "The lack of proper guidance and protection for the medium leaves him open to deterioration. He is liable to become the sport of the elementary spirits who are attracted to him. In many cases the atmosphere breathed in your séance room is to us as is a wall to you, impenetrable and poisonous too. We cannot breathe it. The grosser spirits can, and the earthbound can use it too" (2, p. 68). "We look to the future with apprehension. We doubt our power to persuade men to rise above the material" (2, p. 69). "The phenomena [material manifestations] are produced by spirits who can produce them best. Those spirits are the lowest and most earthly" (2, p. 74). "The mighty ones are not the agents who can be used in bringing home evidence of the kind needed by the materialist. They have no longer any power over gross matter, and would be unable so to act. You should confine the phenomenal [material manifestations] to circles where the best evidence can be given by spirits who are most able. From them you should ask nothing more, even as from the higher spirits you should not ask any evidence of the material kind" (2, p. 74). "The conflict raging amongst you is but the reflex of the conflict that is going on with us. A strife is going on in your world on the subject of the suppression of the fact of spirit-communion" (2, p. 40).

5. Humans can influence and affect spirits.

"You may desire the return of a spirit. Sometimes a return to earth would be a step backward, and would militate against the law of progression. Laws of progression are often violated by dragging spirits back to earth, your wills being more powerful than theirs" (2, p. 46). "There have recurred seasons when undeveloped intelligences have had predominance. Especially are such seasons consequent on great wars among you. Many spirits are prematurely withdrawn from the body. They then pass before they are fit; and at the moment of departure they are in evil state, angry, blood-thirsty, filled with evil passion. They do mischief great and long in after-life" (1, p. 17). "The spiritual atmosphere is now much disturbed, and the clouds do not seem to lift. It is from your world that the darkness chiefly comes" (2, pp. 40-41). "Prayer is good, as by it man moves forces" (2, p. 20).

6. Medium's capacity limits the communication from spirits.

"The most difficult task we have is to select a medium through whom the messages of the higher and more advanced spirits can be made known. It is necessary that the mind chosen should be of a receptive character, for we cannot put into a spirit more information than it can receive" (1, p. 35). "When the medium is mentally undeveloped the higher spirits will not endeavour to influence him" (2, p. 31).

7. For a democratic human society the spirits would use multiple inputs of message into the human world instead of using only one channel as authoritative.

"We [spirits] were told that in such a democratic age it would not do [as in the case of the Christ] for only one prophet to be raised up. Now the truth was coming to many in many different ways" (2, p. 27). "Truth has hitherto centered itself in a single representative, but hereafter it will not be so. It will be given through many mediums, purged of all that is individual, permeating the world and animating recipient souls. The times of exclusive-

ness are over; the times of open vision have arrived, when democracy rather than aristocracy shall be the leading principle" (2, p. 28).

8. *Other religions are also valid.*

"The majority of Christian men regard themselves as the heirs of an assured Heaven, and believe that the Supreme has sent his Own Son to live and die for them, . . . and that it is their bounden duty to instruct the Hindoos, Chinese and the heathen in general in the doctrines confided to them alone. Put aside such doctrines as false and egotistical" (2, p. 23). "Each religion, as sent by God, has one great idea; and Spiritualism, as you are pleased to call it, gathers them together into one harmonious whole" (2, p. 23). "The Christian Church is not the only recipient of divine favour, . . . another branch received a portion and carried it into other lands. To each was given but a fragment of the whole Truth of God" (2, p. 28).

9. *God is not a personality.*

"We [spirits] would speak of the true conception of God. Not as a personal being, human in His attributes save Omnipotence; not as a glorified humanity, but as the All-Pervading Spirit permeating the universe. We present to you a Deity Whose Name, as revealed, is Love. Love, confined within no limits. God is no Person, but is all-pervading" (2, p. 20). "God, so far as we have known Him, is not a limited personality, nor was He ever enshrined in a human body, or amenable to human influence" (2, p. 20). "On the one hand, we have to avoid the fatal error that seeks to reduce God to a Force . . . God is really an informing, energising Spirit. He supplies the light and love that give beauty to all around you. God is not a force, nor the impersonal entity you call Nature. Try and regard Him as the Informing Spirit, permeating all" (2, p. 20). "God Himself is the centre of influence" (2, p. 17). SM wrote the following comment regarding God: "Spirits who return to earth have little to tell, apparently, of God. The general drift of spirit teaching is curiously in the direction of a refined and spiritualised Pantheism" (2, p. 122).

10. *Knowledge and inventions are not human creation, but transmission from spirits.*

"Man becomes the means of disseminating the knowledge of which he is the unconscious recipient" (2, p. 17). "The invention has existed there before man has discovered it. The flashes of genius are but reflected gleams from the world where ideas germinate" (2, p. 54)

11. *Spirits do not need language. They use direct thought-transfer.*

"We mean the suggesting to the mind the thought which is not framed in words. It is the highest form of communication only practicable when the whole being is permeable by spirit-control. In such cases, converse with spirits is maintained mentally, and words are not necessary; even as in our higher states we have no voice nor language, but spirit is cognisant of spirit, and intercourse is perfect and complete" (2, pp. 64-65).

12. *Birth of spirits.*

"The creation of spirits is perpetually going on, both in your world and the spiritual world" (2, p. 26). "New creations of spirits are formed by condensation of the atmosphere" (2, p. 27). "The birth of a spirit in the spheres is very like the birth of an infant in the world. The new-born spirit requires care and guidance" (2, p. 44).

13. Incarnation and reincarnation.

"These spirits [who have never been incarnated] sometimes become incarnated of their free will; they accept as volunteers the mission of mercy, and while incarnated, they lose their identity. Many high spirits have incarnated themselves. They return to the spheres with increased knowledge of a peculiar phase of existence" (2, pp. 24-25). "Spirit is developed through various processes up to the time of its incarnation" (2, p. 39). "With regard to re-incarnation, Imperator always said it was not true as generally held. It occurred sometimes when an exalted spirit wished to return to benefit mankind; it also happened when a spirit was so wicked that it sank to the lowest sphere and became merged in the ocean of spirit, to be at some future time re-incarnated; though, perhaps not in this world, as a school that has failed once was not likely to be tried again" (2, pp. 43-44).

14. Other planets.

"All spirits are not incarnated on your earth, but there are some special experiences that can only be obtained on your planet. In all worlds there are capacities for spiritual development, and all of them are inhabited" (2, p. 25). "You are on this planet in nearly the lowest stage of being; many worlds are in a much higher state of development; and some are in process of formation. Mercury is on the lowest plane, Jupiter the highest" (2, p. 25). "Spirits have rarely come to this earth-plane from other planets" (2, p. 26). "A spirit that has been incarnated in other spheres of being may afterwards be incarnated on your earth" (2, p. 26).

15. Animals, vegetables and minerals.

"In the spirit-world there are the same gradations of substance that you have, such as vegetable, mineral and animal" (2, p. 39). "Animals are also there [in the spirit world], as life, once created, never dies" (2, p. 44).

16. Death while in childhood.

"The experience of the earth-life cannot be dispensed with. The absence of contamination [by vices, temptation, etc.] ensures a rapid passage through the spheres of purification, but the absence of experience and knowledge requires to be remedied by training and education" (1, p. 25). "Many a child-spirit leaves the earth-life pure and unsullied who would have been exposed to temptation and grievous trial; and so it gains in purity what it has lost in knowledge. The child may have the one qualification; it cannot have the other save by education, which is frequently gained by its being attached to a medium, and living over the earth life again. . . . Such experience is essential; and for the purpose of gaining it many spirits elect to return to earth, and, by attaching themselves to a medium, gain the special phase of experience which they need" (1, p. 25).

17. Death by murder, suicide or accident.

"Nothing is more dangerous than for souls to be rudely severed from their bodily habitation, and to be launched into spirit-life, with angry passions stirred, and revengeful feelings dominant. It is bad that any should be dismissed from earth life suddenly, and before the bond is naturally severed. It is for this reason that all destruction of bodily life is foolish and rude" (1, p. 17). "You place him [a convict executed by death-penalty] in the midst of evil associations, in company with offenders like himself, where the very atmos-

phere is heavy with evil, where the hordes of the undeveloped and unprogressed spirits most do congregate, and where, both from human associates and spirit influence, the whole tendency is evil" (1, p. 18). "The soul, suddenly severed from the body, is thrown back, and becomes grievously dangerous to humanity. The guardians cannot draw near, and great difficulties are set in the way of its progress" (2, p. 43). "Your wars and your wholesale murderings are even more fearful. . . . Vengeful, debased, cruel, earth-bound spirits throng around your earth-sphere, and incite the debased who are still in the body to deeds of cruelty and lust and sin" (1, p. 20).

18. Time of death is not necessarily predetermined.

"Never kill the body, as you sever from a body, a spirit that has not fulfilled its time in your sphere of being" (2, p. 48). (If time of death is predetermined, nobody would be guilty of murder.)

19. Poverty and other adverse environments.

"People born in poverty and vice, with but few opportunities for good, will have their education in the other world" (2, p. 44). "The man who leaves your world was born into it under conditions of which you know nothing, the victim of vices over which, most frequently, he had no control" (2, p. 39).

20. Special care unit in the spirit world.

"Many who are withdrawn prematurely or roughly, are tended by those spirits who devote themselves to the work in a special sphere set apart for them near the earth on which they have been incarnated" (2, p. 89). "None from that sphere can be permitted to manifest on your earth" (2, p. 89).

21. Spirits who have been "failures" often become teachers for the failing spirits.

"They who have missed and failed of harmony and progress in the earth-sphere do oft return and minister to those who are suffering, even as they once suffered" (2, p. 89).

22. Spirits undergo several levels of body-shedding before entering the spheres of contemplation.

"Immediately on its release from the body, the spirit gathers a new body from its new surroundings, and is clothed with a refined substance like to the flesh it has cast off. The spirit is always encased in a body of matter, as you would say; but matter impalpable to your senses, though as perceptible to us as is the grossest material substance to yours" (2, p. 94). "After leaving the earth-spheres, [the spirit] enters upon a course of purification, in process of which it passes through many changes analogous to death. Even as from the earth-body is eliminated a body more refined than it, but not dissimilar from it: so, from it again when the spirit has advanced sufficiently, is eliminated a more refined body; and so on, till the process of refinement has fitted it to enter the spheres of contemplation" (2, p. 94).

23. Association by congeniality.

To the question as to whether marriage ties are perpetuated beyond earth-life, the following answer was given: "That depends entirely on similarity of taste and equality of development. In the case of this being attained, the spirits can progress side by side. In our state we know only of community of taste and of association between those who

are on the same plane, and can be developed by mutual help. All things with us are subordinated in the education of the spirit which is perpetually being developed. There can be no community of interest save between congenial souls. Consequently no tie can be perpetuated which is not a help to progress. The uncongenial bonds which have embittered the soul's earth life, and marred its upward progress cease with the bodily existence. The union of soul with soul which in the body has been a source of support and assistance is developed and increased after the spirit is free. The loving bonds which encircle such souls are the greatest incentive to mutual development, and so the relations are perpetuated, not because they have once existed, but because in the eternal fitness of things they minister to the spirits' education. . . . When the period arrives at which it is more profitable for them to separate they go their way without sorrow" (1, p. 45). "We could not obtain really close union with any spirit unless the intelligence be absolutely on the same mental and progressive plane" (1, p. 46). "Souls attract souls by congeniality of pursuit, by similarity of temper, by remembrance of previous association, or by present work" (2, p. 59). "We are attracted by sympathy, repelled by antipathy, drawn by desire on our part, or on that of those who wish for our presence" (2, p. 59). "Affinities congregate, and rejoice in congenial society. Not from neighbourhood or locality, but from similarity of tastes or pursuits" (2, p. 60). "With us it would be impossible for any spirit to live with those for whose society it was not fitted" (2, p. 42).

24. Bonds of affection possible independent from association by congeniality.

To the question as to what happens to those who are not on the same mental or moral plane but yet are full of mutual love, the following answer was given: "Spirits filled with mutual love can never be really separated. You are hampered in understanding our state by consideration of time and space. . . . We know no time, no space. . . . Soul may be linked with soul in bonds of affection, without any intimate connection such as we mean by being on the same plane of development" (1, pp. 45-46).

25. Association between man and spirits.

"Evil attracts evil. A curious vain, frivolous or bad man will draw round him frivolous or underdeveloped spirits; but it is at times not true equally of the pure and good. They may be subject to attack from the underdeveloped, either as part of their training, or from the machinations of the adversaries" (2, p. 53).

26. Spirits are mutually interdependent through and between levels. Spirits on higher levels are dependent on spirits on lower levels, and vice-versa.

"It is the eternal law of interdependence. In spirit-life we do not talk of independence. That is a fallacy of earth. Spirits are in union and communion mutually interdependent. They are joined in rapport with those from whom they have learned, or to whom they have taught somewhat" (2, p. 38).

27. Spirits are not divided into absolute categories of good and bad.

"You cannot roughly divide souls into bad and good, as each soul is in a state of progression, and is not fitted for either of these conditions" (2, p. 38).

28. Stages of progress are indicated by different colors.

"The spirits of wisdom are typified by their robes and auras of sapphire blue in their

appearance to other spirits; the spirits of love by the crimson which typifies their sacrifice and devotion" (2, pp. 62-63). "Violet would indicate a progressive spirit who might be developed. The spirit that is hard and unreceptive of sympathetic influence a green aura encircles, and we cannot approach" (2, p. 66). "He wore the robes [violet, shot with green] from which you would recognise him from his description. The green typifies the earth condition which has not yet faded, and the violet typified progress (2, p. 107). "The brilliant [dazzling white] robe [indicates] his exalted state of purity and perfection" (2, p. 62). "The mediumistic aura to spirit gaze is of golden hue" (2, p. 66).

29. *Prayers reach the guardians, but do not reach the spheres of contemplation.*

"Prayer should be merely aspiration—the striving after a high ideal by means of the spiritual assistance of the guardians around you. Prayer does not reach within the sphere of contemplation" (2, p. 42).

30. *Christ.*

"In case of the Christ a high form of hitherto unincarnated spirit temporarily entered a body for the good of humanity, and to gain experience" (2, p. 24). "Christ has passed in to the Spheres of Contemplation" (2, p. 25). "The Christ has recently returned from the Spheres of Contemplation [to the spheres of work and probation], and is now specially acting on your world. Since we last spoke with you a crisis has taken place in the Spheres of Contemplation, and they have now been placed in communication with us. The highest spirits have again undertaken active mission work in your world" (2, p. 41). "He [Jesus] is now arranging His plans for the gathering in of His people; for the further revelation of Truth, as well as for the purging away of the years of error which have passed. He chooses His messengers in the spheres, and allows us to select our instruments. He is the head of this new endeavour" (2, p. 52). To the question whether Jesus will return to earth, the following answer was given: "Not the man Jesus as He was. He has passed beyond the state when that would be possible. [He is] a spiritual effluence from the higher spheres, temporarily concentrated on you. His work is done by us, who have more power to abide with you. All this strife that surrounds you is the sign of the conflict that attends the new development of Truth" (2, p. 85). "We are passing through an epoch in which great efforts are being made by the adversaries. The powers antagonistic to us vex and harm us and you" (2, p. 86). "We labor to throw round you spiritual conditions of harmony and peace" (2, p. 86).

C. Details of the Cosmology of the Spirit World by Johannes Greber

Though Johannes Greber's book has a length of 430 pages, most of it is devoted to discussion of various aspects of mediumship, procedures for communication, and discussion of the errors in the present Bible due to distortions and mutilations of the original Bible. (According to Greber, these errors, distortions and mutilations as well as their corrections were pointed out and communicated to him by a spirit.)

Most of Greber's cosmosociological discussions are confined in three chapters of his book (3, pp. 257-263, 264-278 and 279-297). But there are scattered discussions of cosmosociological nature in several other chapters of his book. While SM elaborated much on the interrelations and interactions among the spirits, JG did not give much detail in these

aspects of his cosmonsociology except giving some organismic descriptions (subordination of individuals to the society). There are many similarities and differences between SM's spirit world view and that of JG. For example, both state that suicide is detrimental to the development of a spirit, and a spirit so separated from the body must undergo extreme sufferings in the spirit world and fall victim to evil spirits. Both consider human prayers to be comforting and soothing to such a fallen spirit. Both maintain that a medium, because of his sensitivity, is vulnerable to the influences of lower or evil spirits and must take great precautions in his séance. Both wrote that the presence of a person in a séance whose mind is not calm and open hinders communication.

But there are many differences, some of them basic, between SM's spirit world view and that of JG. In order to avoid redundancy in discussing the similarities, the following pages will deal mainly with the differences between the two world views.*

1. The composition of the universe.

At the lowest are several layers of "hell spheres" (Hollenstufen). Next come seven "earth spheres" (irdische Stufen) in the following order from the lowest to the highest: (1) lowest animals; (2) rocks; (3) trees; (4) vegetables; (5) flowers; (6) higher animals; (7) humans. These seven earth spheres have their respective counterpart in the spirit world.

Above these are thirteen "spirit spheres", of which the lowest is below the level of humans.

These spheres were created by God. Some spheres become vacant as spirits in them progress, and God discontinued some of the vacant spheres. Consequently the spirits, who would have moved into these spheres, must wait until they are ready to skip these abolished spheres and move onto next higher still-existing spheres. Extinct animals existed in the spheres which are now abolished. (3, pp. 279-281.)

2. God is personality.

He has the form of a person. He has a face. He is not omnipresent. He has a throne and a house. God is not three persons. (3, pp. 258-59, 263.)

3. God knows everything past and present, and also that portion of future which is predetermined. The outline of the life of a creature is predetermined, but the details are left to the free will of the creature. (3, p. 260.)

4. God created the spirit world gradually, from parents to children, etc. Spirits come in male-female pairs with perfect matching. (3, pp. 264-65.)

5. There is no evolution. (3, p. 280.)

6. Only one God reigns the universe. (3, p. 149.)

7. The spirit world is organismic: the whole has priority over individuals. The individuals exist for the whole. (3, pp. 266-67.)

8. The "leader-follower" model for revolution, and "ignorant mass" as a tool for revolution. (3, pp. 268-69.)

* In the manuscript of this paper, extensive quotations are given for each of the following nineteen points in the original German. They have been omitted here, and only the portions in English reproduced. — *Editor.*

This contrasts with the mutual interaction model of SM.

9. *There is no retrogression among spirits. (3, p. 281.)*

10. *But man can fall into the lowest of the thirteen spirit spheres, that is lower than the human level. (3, p. 291.)*

11. *The single communicating spirit.*

Most of the descriptions of the spirit world were "communicated" to JG by one spirit. This contrasts to SM in two aspects: for SM, a team of spirits worked on the communication to him, and occasionally several other spirits participated in the activity (Philosophus, Magnus, Theophilus, etc.); these spirits asserted that in a democratic human society the communication from the spirit world needs to be channeled to many persons in many different ways.

12. *The communicating spirit asserts his authenticity by swearing.*

In SM's work, spirits repeatedly emphasized that the humans must use human reason to judge the authenticity and the validity of the communication. In JG's work, on the other hand, the spirit frequently asserts his authenticity by swearing. Even though in a small number of occasions the spirit advises JG to check the validity of the communication, the criteria the spirit suggests are not human reason, but are: (1) comparison with other spiritual experiences; (2) whether the spirit can swear his identity in the name of God; (3) A spirit sent by God will not allow humans to raise questions about him or interrogate him, and does not allow humans to determine or influence when he would speak. Only questions about specific points in the communication, which the receiver did not understand, are permitted. (3, pp. 22, 25, 109, 185, 261.)

13. *JG's spirit speaks with authoritarian tone.*

"Salute God!"; "It is none of your business"; "Such matters are incomprehensible to humans"; etc., are frequent phrases used by JG's spirit. The tone of his statements is most of the times what we are inclined to consider authoritarian. While SM's spirits often point out limitations of knowledge among the spirits and make statements such as "we do not know" or "we lose sight of it", JG's spirit talks as if he knows the absolute truth. (3, pp. 16-17.)

14. *Other religions.*

Although JG mentions the merits of Hinduism at one occasion, he tends to categorize non-Christian religion as heathen. He regards "heathens" as nothing other than "connection with devils", and polytheistic religion as false. (3, pp. 146, 179, 101.)

15. *Incarnation and reincarnation.*

After bodily death, the spirit goes into its corresponding parallel earth sphere for spirits. Unless the spirit has made a progress in the material life, it will eventually be sent back to the same level of the material sphere in repeated reincarnations until it is ready to be incarnated into a higher material sphere. Most humans reincarnate repeatedly into the earth life. Some higher spirits were permitted to incarnate as humans in order to help men. These spirits went back to their original spheres after their bodily death. (3, pp. 280-81, 290-91, 289.)

16. *Time of death is predetermined, but not necessarily the manner of death. (3, p. 83.)*

17. *In the Christian society the members were homogeneous. (3, p. 146.)*

This contrasts with the spirit world view by SM, in which there are individual variations in taste, knowledge, opinions, etc.

18. *Colors in the spirit world*. (3, p. 291.)

19. *Christ*. (3, p. 265.)

D. Conclusion and Suggestion for Further Research

We have studied two spirit world views by two mediums. One of the spirit world views, by an English medium, was mutualistic, interactionistic, heterogeneistic, relativistic, "democratic" and pantheistic. The other, by a German medium, was monotheistic, homogeneistic, unidirectionalistic, organismic and authoritarian.

This suggests that cultural or individual factors of the medium may correlate highly with the type of his spirit world view. In order to test this as a hypothesis, we need to study a sufficient number of mediums and their spirit world views in a sufficient range of variations.

Another suggested direction of research is to study how the mediums themselves would explain the individual and cultural differences in cosmologies held by different mediums. The explanations given by the mediums would again reflect the epistemology of the mediums and would vary from culture to culture and from medium to medium. Johannes Greber, if alive, would probably attribute the variations to errors induced by evil spirits. On the other hand, Stainton Moses actually attributed the variations to the *differences* in personality, knowledge and level of enlightenment *among the spirits* (rather than among the mediums) who act either as message senders or as "controls". A "control" is a spirit who mediates between the human medium and the spirits who want to communicate with humans through the human medium. By a logical extension, Stainton Moses, if alive, might propose a "spirit world multiculture theory", i.e., an explanation that there are different cultures within the spirit world, and that each medium relates to one culture or subculture in the spirit world. The study of these types of the internal logic of the explanation regarding the differences between cosmologies is another topic of interest to cultural epistemologists and cultural logicians.

This article pointed out the quality of details of the cosmological structure available in two contrasting cultures by two mediums in order to stimulate further study in this area of inquiry. If such details can be obtained in many cultures, statistical analysis of the correlation between the cosmological structure of the spiritualists and the epistemological and logical structure held by them and by the general population in their cultures becomes possible. Furthermore, the variability among mediums within each culture must be studied. Since detailed formulations of cosmological structure by spiritualists are difficult to obtain in many cultures, the author would appreciate relevant data and information from readers.

References

1. S. Moses (pseudonym: Oxon, M.A.), *Spirit Teachings* (London: Psychol. Press Assn., 1883).
2. S. Moses, *More Spirit Teachings* (London: Psychic Book Club, 1952).
3. J. Greber, *Der Verkehr mit der Geisterwelt* (New York: John Felsberg, 1937).

THREE POEMS

Infinitoned

Infinitoned in time and space,
With spirit-ken we find our place.
Hyper-sensed we empathize,
Between our trans-directed, separate lives.
Though plain to see, but seldom found,
We're multi-planed and supra-bound!

We'll Meet Again

we'll meet again . . .
don't know in which where
or what when . . .
and when we do we'll know we once
had been
in touch. . . .
how goes your day my friend/
. . . thank you for sharing
the joy-tone and span-song
of your destiny.

Omnidirectional Halo

If into the sound of silence
We cast a joy vibration,
'Twill form a sphere and reappear
To all finite creation.

James B. Beal

Formerly an aerospace engineer for NASA's Marshall Space Flight Center, James B. Beal is now a research engineer with the National Parkinson Foundation in Miami and technical assistant to its president. He is a specialist in biosystems research, bioelectric field effects, and parapsysics, and has written and lectured extensively on these subjects.

WORLD PROBLEMS AND HUMAN POTENTIAL

Anthony Judge

Is it possible and useful to assemble together, and interrelate within one framework, information: on the complete range of problems by which humanity perceives itself to be faced; on the organizational, human and intellectual resources it believes it has at its disposal; on the values in the light of which it is believed any change should be guided; and on the concepts of human development considered to be either the means or the end of any such societal transformation?

This is the question to which two organizations have attempted to provide a first answer in an ongoing joint project initiated in Brussels in 1972. The first results recently appeared in a 1136 page reference book entitled *Yearbook of World Problems and Human Potential 1976*.¹ For one of the bodies, the

1. Published 1976 by Union of International Associations and Mankind 2000, 1 rue aux Laines, 1000 Brussels, Belgium.

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Union of International Association (founded in 1910), the project is a logical extension of its functions as a clearing-house for information on the networks of international agencies and associations and their preoccupations in every field of human activity.² For the second, Mankind 2000 (founded in 1964), it is a means of bringing into focus its prime concern with the place and development of the human being in the emerging world society. Both are transnational nonprofit associations for whom the gravity of the present and foreseeable problems—as well as the creative opportunities—merits a high-risk, innovative programme at this time.

The Current Situation

The project has been undertaken in a period of progressive fragmentation in every domain—both social and personal. The remedies attempted have tended to involve simplistic unification, suppression of variety, and consequent alienation of those whose perspectives are ignored—thus aggravating the degree of fragmentation and increasing the spastic and violent aspects of social processes. At the same time, there is concern that the complexity and dynamism of the network of world problems may not be comprehensible in its totality because of the present limita-

2. A profile of the U.I.A. by the author appeared in *World Union* 2, no. 3 (June 1962): 40-43.

tions of the human being. Consequently much remedial action may either be a waste of resources or contribute directly to the aggravation of other problems. Such difficulties prevent greater attention to all aspects of the emerging crises and to the opportunities which they represent. They hinder development of the new organizational and conceptual approaches, of matching complexity and dynamism, necessary to facilitate the efforts of all concerned to respond appropriately.

It is difficult, if not impossible, for any group or combination of groups to make any significant contribution with such constraints, and with the usual limitation on resources. But it did seem very clear that what was lacking, as an aid to any thought or action at this time, was a framework in a context in which the dimension of human development had more than a token place.

The project has therefore become an exercise in the development of a framework to handle and interrelate diverse and seemingly incompatible categories of information. As such, it is a bridging exercise between those sectors, whether governmental or not, primarily concerned with: problem detection, research, policy formulation, organizational development, remedial programme action, educational re-presentation of information, and public information. It is hoped that the attempt to map the complexity currently perceived will help to stimulate new efforts in each of these sectors which will lead to a new type of "network strategy" more capable of portraying and containing the network of problems as it is now believed to be evolving.

First Results

The first edition of the *Yearbook of World Problems and Human Potential* contains over 12,000 descriptive entries embedded in a net-

work of 57,000 interrelationships. Over 2,600 world problems have been described from the documents of international organizations and schools of thought (of every persuasion). These problems are themselves interlinked by some 13,000 relationships of several types (e.g., the aggravation or the alleviation of one problem by another).

Matching these problems are 3,300 international governmental and nongovernmental bodies in a section abridged from a sister volume, the UN-endorsed *Yearbook of International Organizations*. Some 900 multilateral treaties are registered (in many cases with an indication of which countries have *not* ratified them). Similarly, some 1,800 intellectual disciplines or sciences have been defined. Organizations, treaties and disciplines are all important but different means by which society may attempt to contain specific world problems. Hitherto, it has been difficult to determine which of these resources was relevant to which problem, or where there was duplication or inaction.

Of special interest though, are three other sections: on human development concepts; on interdisciplinary, integrative and unitary concepts; and on human values. In each case, whilst these domains are of considerable current interest, it has hitherto been very difficult to obtain a clear understanding of the range of concepts which have been formulated, advocated, or implemented in some way. And yet they represent the essence of our growing ability to respond more appropriately.

Some 220 concepts, associated with many different views of the meaning and process of human development and integration, have been described—ranging from the I Ching, through various forms of yoga and other spiritual disciplines, to orthodox psychologi-

cal concepts and the many forms of psychotherapy. A similar approach has been adopted for 420 concepts with an integrative, interdisciplinary or unitary emphasis—ranging from mathematical elegance, symmetry and wholeness, through various concepts of social integration and world order, to cybernetics and general systems concepts. This section attempts to include descriptions of any concepts whose essential characteristic is to interrelate or integrate incommensurable (or in some way incompatible) concepts, modes of experience, or methods of study. These are the frameworks through which complexity can be grasped with the intellect. In the case of the human values, over 700 are recorded with both their synonyms and antonyms. The latter are often a clue to the world problems which are perceived in the light of the value—most problems being the disguised consequence of value distortion.

Simplicity or Complexity?

It may be argued that it is a luxury to indulge in the identification of 2,600 problems, when the most important 5 or 10 are known to all—others merely being components of these major problems or else of no significance. But unfortunately there is no consensus on what are the 5 or 10, and certainly not on their order of importance. (For the author, the "major problem" is the simplistic belief that the identification of the major problems is an appropriate attitude at this time. For a biologist to attempt to identify the 5 or 10 major species essential for ecological stability would be equally ridiculous—many thousands define the nature of the whole.)

In order to understand the various ways in which problems can be relatively important, it is necessary to focus on the network of

problems which establish or erode that importance through many unforeseen relationships—and for different groups at different times. But perhaps of greatest importance, individuals and groups may identify an "unimportant" problem as being of greatest importance to them—either because of ignorance or because they are better informed than others concerning its disastrous potential. Unless it can be shown how all the problems weave together to make possible the emergence of unforeseen macro-problems, it will continue to be difficult to persuade people to allocate resources to anything but the problem they know best. Little attention has been given to such matters.

Is it possible, for example, that even in an ideal society a certain minimum number of problems (per capita?) would be necessary to provide a focus for social action and a training ground for individual human development? Is a problem-free environment the social equivalent of sensory deprivation (which is the basis for current sophisticated methods of torture)? Does the surprising—almost superstitious—reluctance of sophisticated people to identify the problems with which their organizations are concerned, suggest a rich parallel between the Jungian concept of an individual's "shadow nature" and humanity's "network of problems"?

Implications

The mere assembly of information within the framework provided by the *Yearbook* is not sufficient justification for the project, however. Of greater importance is the clarification of the interdependence of areas or modes of attention which are usually kept apart. Problems can no longer be usefully perceived in isolation, nor can organizations

or concepts. They are all embedded in networks of relationships which define them and their significance at any time.

Perhaps of greatest importance is the clarification of the interaction between organizational resources, intellectual resources, values and individual integration. To the extent that integration is facilitated in any of these domains, it will tend to stimulate, support and reinforce integration in the others—thus increasing the ability to respond to the problem complex. However, to the extent that fragmentation is facilitated or integration hindered, the reverse then becomes true—thus reducing the ability to respond to the problem complex.

Space does not permit more than a brief reference to related matters examined in the volume, such as: the production of problem and conceptual maps (analogous to road maps), methods for increasing the comprehensibility of networks, the extent to which problems "really exist" except in the minds of their proponents, the analogy between problem networks and ecological food webs between

species, the maturation of society, and the structural analysis of networks to locate their "weakest" and "strongest" points with a view to more effective action in a pluralistic society.

In the light of what has been achieved so far, and what that now makes possible, the collection of information in the *Yearbook of World Problems and Human Potential* may be seen as an attempt to catalyze the process of conscious synthesis, wherever it may occur, as a basis for a more adequate response to our environment.

It is perhaps not surprising to detect, within such integrative concentrations of information, the very faint outlines of a certain convergent synthesis of great subtlety. This weaves together a new world order, a rich pattern of values, a new image of the human being, an intellectual synthesis, and a transmutation of the significance of the problem complex with which we choose to confront ourselves.

PROMETHEUS AGAIN

Desmond Tarrant

I see no reason why the decay of culture should not proceed much further, and why we may not even anticipate a period, of some duration, [which] will have no culture. Then culture will have to grow again from the soil. . . .

T.S. Eliot

In the white light the black hands dominated. Yet the yellow hands and white hands moved with an equal precision. All consumed with the same relentless even appetite. Occasionally a card would be withdrawn, receive statistics and dates, and be replaced, and the forward march of fingers would continue. There was no sound as the group of three men and two women worked on beneath tiered books as they had done and would do for seemingly endless time.

These were the privileged: descendants, relatives or — in various ways — associates of the ruling class of Merchant-Politicos. These were the lapdogs and poodles, the one-time “artists”, who were displayed on certain

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occasions as the cultural heart of the millennium.

Meanwhile they constructed statistical pictures of the past from books as old as a thousand years and films and records even from Ancient Europe. The Negro could recite all the population changes throughout the entire Darker Ages, from the Industrial Revolution until the Final World War of 1990. All were adept at compiling bibliographies, and bibliographies of bibliographies: when once the books were thus gutted of their substance, they were moved to vaults and sealed off until new formulae would render possible yet further bibliographies.

At times, small lights would glow between the eyes from the thought-bands of one of the group who would react according to its colour. If the light were blue or green the reaction would be deliberately slow for these were thought-intrusions from inferiors or equals requesting data; but if the light were red the reaction was of haste, for this was a thought-intrusion from above. There was rarely need for fear but this was now an inevitable inherited instinct from numberless fear-ridden generations. Fear was possibly

the chief of the few emotions left in this dome-capped city which never saw the sun.

A figure left the group and entered an adjoining film-library. The number of this figure was XM. 30/374 which indicated the male sex, an age of thirty and that the bearer was capable of mating with any female of the same privileged category XM. Yet, in spite of odds of many thousands to one against, 374 was no longer as standard as he had been. After selecting automatic projectors he sat in the dark and watched, for the hundredth time, an ancient film whose title imposed itself on his thought-band in a phrase corresponding to *Hamlet*.

This film had been an initial cause of what 374 had at one time regarded as a form of neurosis. For, in the midst of his routine tabulation of the four-syllabled words in ancient languages, he had found himself listening to what he afterwards came to recognise as the *sense* of the words instead of to their sounds. Some long-forgotten, closed circuits of his mind had stirred vaguely and uneasily. At the time, he had registered this as nothing more than the irritation, from overwork, of the central mental void that was accepted as natural to life. Having direct access to the innermost thoughts of his compatriots, did he not know that all their minds existed around this central void which they all carried to the exterminator as an inevitable disease of existence? At first, believing himself overworked, he had flashed the thought-band of a psychopriest for guidance. The psychopriest had confirmed the diagnosis of overwork and had recommended and authorised an extended visit to a Workers' Playpen or a visit to the Hall of Women and a weeks' sleep.

374 had followed this spiritual advice but the prescription had had results entirely different from its previous applications.

The Workers' Playpens were situated at the ends of blocks housing production lines and existence-quarters. They consisted of large white halls which, during the three-day working week, were bare. At the weekends, however, these were transformed for the benefit of the workers, who filed from their assembly lines into anterooms filled with automatic marijuana-injectors. 374 had stood on a balcony and watched the workers entering in columns from their single-sex workshops. The men and women wore dun coloured diaphanous smocks; all were of good height and build in this hygienic society. The men marched in unison; the women moved stolidly at this stage. With shoulders back and smocks cleaving tightly to well-formed breasts and strong legs they constituted uniform and symmetrical perfection. Negroid and Eastern complexions predominated for, since the fall of the West, the single-world government had discouraged the rebirth of any form of possible reaction.

For the privileged, thought-monitoring had ceased some fifty years previously, owing to the suppression over centuries of all potential rebellious and aesthetic factors of intelligence. Yet the workers' thought-bands were still open to the regular imposition of thought patterns. Although it was considered now to be quite unnecessary, during the week, as a routine safety-precaution, the Politicos had arranged for the transmission to all workers' thought-bands of certain stock phrases. These issued regularly throughout the day from transmitters which were known as Newsboys—one of a number of anachronistic remnants from the Ancient West, the original meaning of which was now lost. These phrases were such as to ensure respect for the rulers' desire to serve the people and to provide happy weekends.

After the injections, these—the highest grade of workers, all physically matched in grades which they would sustain for about six months, before demotion—moved on in growing ecstasy into the Playpens. The walls of the large Pens were now carrying stupendous moving-pictures in stereofonicneurokolor depicting scenes of complete and utter depravity. With thought-bands echoing to syncopated thuds the streams of ecstatic workers moved into the Pens, and began the marathon shufflings of their wooing-rituals; round and round the Pens in increasing abandon they moved, touching sterns, fondling and parting in ever faster tempo spurred by the films and regulated by the thought-bands until they fell aside, pawing and clawing, to spawn in debauchery and to drugged slumber.

374 watched. He experienced no revulsion, for all values or standards of conduct had passed away with the Darker Ages: yet he felt disinclined to participate on this occasion—seen in cold blood, the turmoil beneath him represented very hard work indeed. Instead, he proceeded to the Hall of Women (Privileged Section). But the strange restlessness returned within a few days.

The spiritual guidance of the psychopriests thus no longer sufficed. The real turning point in the strange career of 374 may well have been his return to work and his discovery of the growing fascination of not only such ancient films as *Hamlet* but of the recorded sounds of ancient "orchestras". 374 noted that at times his inner disquiet was eased in the presence of these long-forgotten noises—that they acted upon him as a balm just as the passages from his film acted as a stimulant.

As the months passed by, 374's research became not merely intensive but—unheard of thing—*motivated*. He afterwards realised that

this was his vital period of self-education, his personal renaissance as he rediscovered, at the centre of this tomb, the life-giving wisdom of the ages that had ended with Belsen.

Yet there was great danger in these activities. For, as 374 filled the central void in his existence with learning, he changed. Unending vistas of thought opened up before him and, as he forged on into the past, new areas of his mind were reborn until the new fields of thought were joined by new ranges of feeling. Eventually 374, comparing his mind with those of his immediate circle, realised that he had committed the cardinal sin of their society. He had become a living individual.

Although he was the first for many centuries to commit this crime, 374 knew that, if he were not very careful, his discovery was imminent. For with intercommunication entirely through thought-bands, it was inevitable that, as soon as he held any long intercourse with anyone, his changed mental pattern would be recognised for what it was. And there could be only one consequence. For one thing, living individuals were critical. Criticism was apt to see things as they were and to desire change. This desire could lead to action to bring about the desired change. Such action was subversive. Hence, living individuals were subversive. The only possible consequence would be the exterminator.

Previously, 374 had tended to look forward to the exterminator. After their allotted span of weekends and the departure of lusts, workers and privileged passed into a final orgy chamber and to final slumber from which they never emerged. They did this without question for not only was it the custom but what was the point of continued existence?

Now, however, the new 374 found himself in possession of a questing spirit which insisted on life, on growth. His spiritual en-

largement became the source of ever-deepening reservoirs of energy and will—the will to live, and fulfil. Along with this development had come compassion. This life-force must be given to others and together they must rebel: the dull clay must be revitalised with flame.

Upon this decision, 374 went quickly and quietly to work. Under numerous pretexts—always unquestioned as activity which was entirely automatic—374 subjected his compatriots to a thorough barrage of cultural propaganda consisting of selected films, music and even poetry. For weeks, as he tuned in first to one mind, then to another, reaction was negative. He concentrated particularly on one woman whom he now began to see for the first time, but her work remained as consistently automatic as ever.

Yet, as he felt sure, the time had to come. One evening, many months after the start of his campaign, he noted on the face and in the mind of the Negro, the same vague spasmodic uneasiness that had heralded his own awakening. This came in response to the thousandth repetition of the cry:

What is a man

If his chief good and market of his
time

Be but to sleep and feed? a beast,
no more.

Sure, he that made us with such
large discourse,

Looking before and after, gave us
not

That capability and godlike reason
To fust in us unus'd . . .

At last, bestial oblivion was sparked by inherited remembrance and, eventually, 374 gained the first recruit for his underground movement.

The attack, two-pronged now, continued.

The danger which most concerned 374 and his recruit 482, was the possibility of routine, time-filling enquiries from above which might probe out the newly-formed thought-patterns and lead to alarms. But the privileged were no longer subject to monitoring and, in this vast city-warren, they might well work unnoticed for years. Queries from below were diverted to the unrecruited, whose minds would not endanger the mission.

The red bulbs on the thought-bands stayed unlit and, gradually, the band of workers was enlightened. The small group—except for one who remained steadfast in his oblivion—were welded into the nucleus of a major campaign, the like of which had not been seen for centuries.

In the meantime, 374 and 381—all the females carried odd numbers—were discovering, mutually, yet additional ranges of feeling. For them the campaign came to involve something for which their thought-vocabularies no longer contained a word but which they knew could not be fulfilled in the Playpens. It had been a long time since a man had looked at a woman's eyes as well as her body.

And then the red lights began to glow.

The first of the group to receive the red light was the third recruit to enlightenment; 570 was of Oriental descent and, once committed, unflinchingly dedicated. Fortunately, the long years of suppression could not be thrown off at once.

In an attempt to judge his own budding appreciation, 570 was feeding data into a brain-calculator for its estimate of the aesthetic value of a Matisse when the red light on his thought-band glowed and the dreaded thought-exchange was upon him.

"I have a message from the Almighty."

"Yes . . ."

"The Almighty has been observing your work."

"Yes?"

"The Almighty is well-pleased and has decreed that you and your valiant comrades perform at the ceremony of the Annual Mating in celebration of another glorious year of our great United World Front. You are much honoured. You will submit a programme of events featuring wondrous beauty and loveliness as befits the Almighty and which will credit our great cultural heritage in this the five hundredth year of the Grand Millenium."

"Yes."

"I will think with you again in three days' time—farewell."

570 had reverted to petrified fear and, even if the occasion had arisen, his thought-patterns would have been safely true-to-type. However, 374 knew from past experience that there would shortly be a flow of exchanges and discovery would be certain. He knew well enough what pattern the initial exchanges would have—they were standard and limited and followed a set formula which began with the glories of standardised weather.

374 reviewed the situation. There was no question of refusing a command from the Almighty; yet so much time had passed since there had been any original mental activity that there was little likelihood of raising suspicion for three days—he had, then, three days in which to work. Again, such was the general decline in elasticity of spiritual thought that, provided he and his group could avoid any surface appearance of change—outwardly or inwardly—they could now easily out-think Authority. For with the rediscovery of culture, the group had acquired a growing inner impulse which brought with it an ever-growing sense of purpose while Authority had long ago

gone flaccid in its absolute power. Finally, 374 knew he now had in the group a fund of friendship which once again possessed such long outmoded qualities as honour, loyalty and self-sacrifice as opposed to the isolated units of watchful suspicion which made up their society-at-large—in spite of its back-slapping proclivities at important ceremonies.

The library with its adjoining cinemas, electronic translators and brain calculators became filled with the atmosphere of a campaign headquarters; for all, that is, except the one research worker, of Anglo-Saxon descent, who remained impervious to all appeals to his dormant imaginative faculties. This worker became the diversionary channel for most enquiries from outside and so formed a protective screen behind which the others could proceed with their plans. He played a prominent part, also, in the initial stages of these plans. For, on the grounds of a wish to rehearse certain thought-sequences for their performance before the Almighty, 374 recorded this worker's responses to certain sets of queries which 374 considered would almost certainly represent the queries likely to be put to them by the Almighty's spokesman. These responses were then transferred to the electronic translators which were set not to translate now but to reproduce the required response to any given set of stereotyped queries.

The next step was to beam their thought-bands into a parallel with the electronic translators so that each member of the group could follow the thought exchanges between Authority and the machines in case of a need to risk personal intervention in the event of an unforeseen set of queries. This beaming presented no difficulty as the thought-bands were controlled by the electrical emanations from their human brains. There was

now little to distinguish the emanation from a human brain from the emanation from the machines yet, as 374 and the group were aware, although those around them were very obtuse over the important things, they had once been endlessly cunning over the little things and the group's renewed interest in life was extended yet further with the arrival of the third day.

It was the turn of 374's companion, 381 this time and, as the red light above her eyes glowed ominously, she fought hard to suppress the fear and hysteria which rose in her throat. With 374's hand upon hers she listened as the electronic translator responded steadily to the queries; relentlessly the Almighty's spokesman exchanged his inquiries with the equally relentless machine—and remained satisfied that the "artists" were fulfilling their roles obediently.

With the final exchange of persistent banalities came the test-point of the plot. For, on to the end of each translator's set of responses, 374 had recorded an all-important query of his own and, at the requisite moment, 381 switched this into the conversation.

"We wish to construct an Epic fitting for this important occasion. This Epic will consist of a recitation of all the perversities known to the ultra-ancients of Rome and Egypt. Such an Epic will delight the most fastidious tastes of the Almighty himself. To complete our research for this Epic we shall need to visit the Third Quarter where ancient tombs and pyramids contain essential hieroglyphs incapable of photatomic reproduction. Is permission granted?"

The group hovered in a suspense which seemed to congeal around their hearts like cold blood as the spokesman adjusted his mind to this departure from routine.

"The Almighty will be pleased. Your zeal

is commended. Permission is granted for a group visit to the Third Quarter. Think with me within two weeks—farewell."

With this triumphant end to the exchange, the tension broke and 374 lowered his lean figure to a couch in weary thankfulness. Stage two of his plan was now possible and the way ahead seemed clearer. His intention was for the group to go at once to the rocket terminal outside the city and leave for the Third Quarter, the Mediterranean basin, where—once established in the equivalent research centre there—they would continue their cultural activities to recruit further members for their underground movement.

374 left a hypnosis-message with the remaining unenlightened member of the group so that he would inform the spokesman ten days from then of the group's discovery of such enticing material that, if their Epic were to do the World Front justice, it should be held over until the following Annual Mating. 374 felt sure that this would sound sufficiently zealous and valid not to arouse suspicion and that another of the numerous privileged research groups would be given the honour in their stead. Flattery was the one safe answer to Authority.

As they moved into the escalating streets which pulled them up to the rim of the domed city, the four looked about them with new eyes. Above, the opaque dome blocked the sun's rays, stored them when it shone and released its accumulations at other times so that the city itself was permanently light. The light, owing to the complete absence of colour and to refraction from endless blocks of white existence-quarters, factories and Playpens, was hard and many of the dun-smocked figures on the moving sidewalks kept their eyes closed and relied on their time-sense to move to another belt in their familiar rounds.

Their next barrier was the guard at the heat-beams which barred the exit through the sheerly rising side of the dome. Did their permission to leave still stand—or had a last-minute whim cancelled it? Their numbers were noted and checked into a calculator which was connected to a vast recording machine which automatically tapped all the thought-band exchanges which referred to movements in or out of the dome. Within a few moments this calculator came forth with confirmation of their permitted visit to the Third Quarter and the heat-beams were broken for them to pass through to a fast-moving belt which brought them to the Rocket Terminal.

To leave the dome was an event in itself and one that occurred for few. The group was in view of genuine Nature again and with their reawakened vision this short journey to the

Terminal was a revelation. 374 sucked in his fill of autumn's flames, a gift long renounced by man; now he knew what the ancient Wordsworth had meant by his "still sad music".

At the rocket junction they were directed to their ship which stood in a line of vertical launching tubes. Throughout the twenty-four hours, ships left for or arrived from the four quarters of the earth and also from universal junctions in outer space.

374 and his three compatriots were not sure, until seated in the gyroscopically-balanced inner core of the vessel, that they were really going—at any time, they felt, a red glow would be followed by a cancellation. But, as the pressure beneath the vessel grew, their fear changed to exultation. Finally, as the ship came alive and strained upwards, 374 knew they were on their way.

AUROSCIENCE—III

A Science of a New Consciousness

Alexander Brodt

E. Many-Right-Creativity

The third domain of Aurologic is a dynamic and formative one. It completes the former two with the play of becoming, the dynamis of creation, change and growth. To the foundation of the absolute Vast and the essential structure of the Truth is now added the multiform, ever-changing, living and evolving architecture of the Right. Again, this presents itself as a triple principle, and the three aspects of creativity are: the birth and embodiment of a creation; its unfolding and metamorphosis; its evolutionary self-transcendence. This sequence proceeds from the generation of the Many out of the womb of the One to their mutation into different Many in the process of their self-development, and ultimately to their realization of the fullnesses and wholenesses of one All after the other in their evolutionary advance from one dimension of existence to the next.

MANY-IN-ONE

Liberty : Manifestation

Many-in-One stands for the self-creation of the Supreme Existence, its multiple becoming—the progressive manifestation in the time-drama that unfolds the contents of eternity. On an individual scale it represents all self-impression and self-expression, and so all inner and outer activity. This liberty to receive and to embody variously is defined by the formula Many-in-One, for the process of creation is essentially a releasing of the latent Many from the matrix One, an increasing outpouring into the flow of time of the manifold potentialities ever-present in the simultaneity of the eternal One. Many-in-One is thus the movement from the unmanifest—absolutely or relatively, whether executed by “The One by whom all live, who lives by none”,²⁰ or also by a universal or individual being—to its plurality of self-revelation.

The corresponding dynamis, *manifestation*, means therefore self-creation: to become increasingly aware of and to incarnate the hidden and latent or only partially revealed self—the inner programme and potential—of one’s own being and of all phenomena; and therefore to perceive, unveil and materialize the self in ever richer and more perfect manifestations, to embody its fullness in the microcosmic human personality and in the terrestrial and macrocosmic environment. All mental activity constitutes a process of manifestation. For in all mental dynamics, obviously some substance, vibration, energy, form—however different from the usual type of thought—is manifested in the mind. As we know, each mental orga-

nism is a receiver attuned to the cosmic mind and life and material consciousness, and presently beginning to attune to supermind or logos. Thus, manifestation encompasses the inner process in the consciousness itself, self-impression, as well as the outer process of materialization, self-expression.

In order to receive and to create, one naturally needs to make use of *liberty*, the freedom of impression and expression: the progressive liberation from the limitations of one's ordinary reception-range so that one becomes open to vibrations which lie outside its restricted field; the complementary liberation from the incapacities of the transmitting and creating instrument, so that an ever more perfect embodiment and materialization is achieved. In Aurologic we are encouraged to penetrate the treasure-house of eternity, and with its riches to adorn the endless roads of time. We are free to play, to dream, to experiment: to incarnate the unmanifest in ever new forms, to advance towards ever wider time-dimensions which bring an increasing sense of simultaneity, a more perfect emblem of eternity.

Liberty and manifestation thus emerge as the *dynamic* prerequisites for the development and active realization of all aurological movements. The first two foundations of Aurologic—the absolute triple oneness which encompasses the Reality Game of the One, All, Many, and the essential triple allness of the infinite and its finite play, its world-process—are now completed with the third base: the time-process of the eternal, the dynamic triple manyness. The practice of the Many-in-One naturally arises from this fundamental awareness of the temporal in relation to the eternal. The same methods which have been elucidated for the One-in-One and the All-in-All provide us again with the basic actualization-programme for the development of an increasing awareness of time as the eternal's process of self-unfolding and for a growing experience and contacting of eternity. To the mantric truths "All is One" and "All is present in All" is now added "The Many are the becoming One".

The remembrance and awareness of eternity containing and immanent in the flow of time must evidently also be present in all mental activity. Oneness is the breath of life which alone gives truth-thinking its existence. Infinity gives us the limitless playfield in which all thought-process unrolls, the all-pervading substance from which all delimitations are carved out. From the perspective of eternity, and in its light, all life reveals itself as—and all mental life becomes—the eternal festival of a growing procession: the One's multiple, evolutionary self-periphery.

The implementation of the seventh aurological movement in detailed, practical mental dynamics moves from the within to the without in a harmonious progression—from the reception of a manifestation to its embodiment.

The following programme for the cultivation of a growing reception develops a twofold method of openness and receptivity. Openness is the more passive element, the right attitude which is imperative in order to receive. Receptivity is the more active procedure, the right concentration and effort, creating the openings through which one can receive all the inner and outer, subtle and material messages emitted constantly by all being and becoming.

Openness is to be open to the truth; it is first the truth above, the next rung on evolution's ladder of consciousness—the logosphere, the new consciousness present in the

terrestrial atmosphere which works as the leader of our further human evolution towards the planetary man, the cosmic man and ultimately the gnostic superman.

Openness to the truth above is completed by a responsiveness to the truth below, that is, to the manifested universe and all its phenomena as well as to the aurological truth-thinker and therefore to the realms of one's own awareness and being. The opening of the inner and outer doors is a simultaneous process, for the dichotomy between the objective and the subjective is a chimera. The more one is aware of one's self and nature, the more one is conscious of the self and nature of all phenomena. Once the shutters are opened, the landscape reveals itself through the opening in our consciousness and can be manifested in transparent mental, vital and physical creations, in a new world extending in every direction to the infinite.

We must want, we must will, we must strive to open ourselves to the logosphere and to the truth everywhere. Ardent aspiration, concentrated will, perseverant effort, courageous faith are the four cornerstones on which our attempt to open ourselves to the new consciousness must found itself. The methods of truth-thinking—integrality, transparency, creativity—together with the implementation of Aurologic, complement this inner foundation with the active training for the mind to open itself to the influence of the new consciousness: to develop the six initial faculties of the logosphere—truth-conception, truth-intelligence, truth-hearing, truth-vision, truth-resonance, truth-experience; to canalize and direct the inflow of the logosphere in all mental activity, in the thought-processes and creative expressions; to thus enable the new consciousness to transform the physical mind into a capable receiver, processor and transmitter, an instrument of the truth.

Receptivity means that an effort is made to really become aware of a phenomenon or a reality, to penetrate its inner being, to unravel its self-law, its true inner programme. It seeks to establish a more direct knowledge of and more intimate and real communication with everything through the contact of the subtle vibrations and radiations, the receiving of the movements of consciousness inherent in each thing and movement. This truth-receptivity attempts further to see everything as a symbol and a parable, an image, *eidolon*, of the one multitudinous Reality, so that everything becomes transparent and reveals its specific symbolic manifestation, as well as symbolic representation of the whole, which, being present in each of its parts, naturally also expresses its totality in everything.

To clarify this method of evoking integrality, transparency and creativity within the Many-in-One's field of action, let us take a phenomenon, say a tree, and follow in some of its aspects the course of receptivity and openness.

Receptivity to the symbolism of the tree includes the perception of how the play of the One and the Many is expressed within it. Every leaf and branch and blossom obeys its own self-law and is unique in constitution and movement, yet all together unite harmoniously in the single wholeness of the entire tree, which is present in every part; for each leaf does not exist independently from it, but is the tree: the Many are always the One, and simultaneously possess their individual existence.

Sensitivity to the movements of consciousness, reveals, for instance, an aspiration—the soul's ardent yearning for the truth, its flaming up towards the superconscious heights of

being—in the upward growth of the tree, its eager reaching out and straining for the light of the sun which is the physical representation of the Truth and the supreme Light. The vibration of harmony and peace which a tree radiates is its most obvious and easily perceived movement of consciousness.

Openness to the inner programme and being shows the laws and movements of evolution at work in the tree, and, if followed far enough in their implications, leads to the comprehension of cosmic and terrestrial evolution.

We have arrived now at the next domain of the continuum of manifestation and so we pass from reception's inner creation to the outer one of materialization. Two are the basic constituents of a materialized creation, its essence and embodiment: on one hand, its soul, its inner programme and on the other hand, the subtle as well as gross material body with their substances, vibrations, energies, forms. The movement of self-expression naturally advances from the essence to its embodiment. The relationship between essence and materialization is such that the success of an incarnation depends on the perfection with which it reproduces as a replica the essence, the fullness with which it expresses the contents of the inner programme.

First, one has to receive the essence, to open the corridors and halls of the mind sufficiently to enable it to enter. This stage of reception we have just dealt with is brought about through the six initial faculties of the logosphere, the methods of truth-thinking—through openness and receptivity. A prominent instance is truth-vision, the famous flash of intuition in which the step by step structural labour of the grey cells is transcended by the sudden inrush of a spontaneous, holistic view of such an essence: the central core of the answer to a problem, of a creative act of self-expression, etc.

Sometimes essence and embodiment are received together, as one whole (e.g., a poet receiving the verses of a creation already fully formed). In general, however, the materialization is an act in itself, which requires a special effort. It is often a laborious and tedious work to incarnate the flash, to give form to the inner vision. It is well known that Einstein received, after a long preparation, the essence of his special relativity theory; but it took him weeks to embody it, and a whole decade to elaborate it further as the general relativity theory.

In order to form an embodiment, the Many-in-One is combined respectively with one of the first six aurological movements. To the manifesting-process can thus be given any required direction. There are then six fundamental procedures which need to be employed in the work of materialization:

1. the integral fusion-process or junction-process of mutation-cum-union;
2. the unifying partial linking of mutation-cum-communion;
3. the diversification-means of mutation-cum-vari-union;
4. the integrative operation and global framing of mutation-cum-inclusion;
5. the ordering, structuring and interconnecting procedures of mutation-cum-relation;
6. the synthesizing and perfecting methods of mutation-cum-harmonization.

The application of the first three movements serve to collect and form all the ingredients necessary to fashion an embodiment and weave them into a multiform unity, as well as to diversify an initially homogeneous (and so often monotonous) form. The second three movements serve to integrate into the global, basic framework of the embodiment all the relevant elements which need to be instilled; to structure and interrelate all the constituents according to any desired scheme; and to perfect the whole, to harmonize all components and constellate them in symbiotic configuration—so that the embracing silhouette takes more and more a plastic and living shape and all the features and organs and limbs are moulded.

These six procedures are applied in the order, proportion, and configurations which best suit the particular type of materialization that is sought to be achieved. No general guidelines can be given here, except the ones already established for the whole of Aurologic and truth-thinking. There is, however, one golden rule: not to interfere with the inner being of a manifestation which tries to express itself; not to press it into pre-forged mental molds, not to accrete all sorts of mental constructions and imaginative fabrications until, in the extreme case, the original purity of the essence is lost. A plastic transmission of the soul-reality which seeks to materialize itself is needed.

The same coupling method is also applied for the last two aurological movements, Many-in-Many and Many-in-All. Hence, it is a basic method for all aspects of the creative process, which can so be likened to alchemy on the mental level. The same operations which underly the formation, transfiguration and evolution of matter are also at work in the supra-physical, vital, mental and spiritual dimensions. The laws of creation, continuation, destruction, change, recreation might be different, but it is no less a "chemical" process of working with elements and force fields and arranging, fusing, relating, harmonizing them according to the desired outcome, of bringing forth the right reactions between the components and energies which will result in the emergence of the subtle or gross material sheath of an essence. The Aurological creator is a conscious alchemist on the mental level (or if one likes a humanistic description: he is an artist, say a mental sculptor).

There remain the achievements of the manifestation-process. Three are the accomplishments which mutually complement themselves in a hierarchical order. They correspond to the aspects of eternity's successive time-process.

The first outcome in the ascending movement of this order is the quantity of the production. Naturally, the practice of Aurologic results in an increase of the output of truth-thinking. The time-process has here the nature of a succession, as one treasure of eternity is added serially after the other.

However, a rich productivity needs to be refined and extended with the second achievement, variety. Manifoldness is realized, if, instead of an abundant repetition of the same kind, a variation of the type of manifestation is compassed, so that they are gained from different categories. Variety includes in Aurologic all aspects and dimensions of Reality. As we know, the spiritual, occult and material constitute the three main categories which truth-thinking seeks to interweave in integral manifestations. Its interdisciplinary approach transcends one-sidedness with creations which unite the entire spectrum of human culture. The

time-process is thus enlarged from a linear series to a global field, in which many simultaneous successions exist, intersecting and combining in a rich play of union, communion and vari-union. Variety therefore expands the linear, unidimensional succession of quantity, and advances towards a global, multidimensional succession.

The Many-in-One culminates in originality. Three components make up originality in the sense of truth-thinking: the quality or perfection of a manifestation, its newness and the intensity and purity with which it incarnates the truth. They are intimately interdependent. A mere repetitive quality evidently cannot satisfy the urge for innovation and progress. Newness and purity of truth, in turn, depend for their full realization on the quality of execution, the perfection of the actual materialization. Again, the really innovative reflects most directly the truth, is the purest manifestation of this supreme life-elixir of our next evolutionary destiny. The time-process becomes here a syntropic succession. To quantity and variety of manifestations is added the perfection of creations, the successive formation of an always greater truth, harmony, quality and richness of manifested being. The revealed and incarnated treasures grow increasingly transparent to eternity's fullness.

Liberty and manifestation, by relating the temporal to the eternal, give us a dynamic flexibility in the manipulation of the logical framework of our first six aurological movements. For they allow the most productive, variegated and original approaches to this framework. Eternity gives us the liberty of its fullness; its time-process provides the multiple dynamis to work out and make use of the limitless potentialities of the logic of the Infinite. To every person is thus given the opportunity to realize his individual self-unfoldment, which arises out of his inmost self-truth. Liberty is the freedom to practice one's own system of logic—to follow an individual path of truth-thinking, to experiment, to play, to dream, to be genuinely creative. Aurologic synthesizes universal and individual logic in the sense that the universal logic is integral. In the vastness of its infinite possibilities, all particular logical unfoldments find their harmonious place. In the truth, there exists no real opposition between the universal and the individual; for that which is truly individual is automatically also universal; and the All manifests its inexhaustible possibilities in the colourful palette of the Many. Convergence and divergence of thinking complement and enrich each other. They allow a greater variety of logic manifestations, as a well as a high degree of plasticity and flexibility in the adaption to the most diverse problems and phenomena and systems. Homogeneity and heterogeneity constitute the two poles of the cosmic play, between which all aurological creativity unfolds itself. An individual truth-thinking in consonant harmony with universal truth is the dynamic requisite for the implementation of Aurologic.

The Many-in-One's realization-programme in a final focus:

The fundamental effort is to relate the temporal to the eternal and to become aware of eternity containing and immanent in the time-drama, as the eternal's process of self-unfoldment in a progressive manifestation. This is sought to be remembered in all thought-activity, so that all mental life becomes a dynamic movement proceeding from the fullness of eternity.

The inner process of manifestation, self-impression, consists of a reception of manifestations in the consciousness through the practice of: openness to the influence of the logosphere, to the truth everywhere and to the inner realms in oneself and in all things;

receptivity to the self-symbolism of the Reality in all existence, to the movements of consciousness, the radiations, the inner programme and subliminal potential of all being and becoming.

Self-expression continues the process of manifestation: once the essence of a creation is received, it is incarnated in subtle and gross material embodiments through a plastic and patient collaboration with the essence, the soul-reality which tries to materialize itself through the transmitting channel of the truth-thinker. This incarnation-process is accomplished by means of six fundamental methods which result from coupling mutation with, respectively, one of the first six aurological movements. And the three achievements which self-expression seeks to attain are a rich productivity, multidimensional variety and increasing truth-originality of manifestations.

The development of an individual truth-thinking in consonant harmony with universal truth, which enables a free experimentation and play and genuine creativity. Every truth-thinker can develop his own approach, path and system of logic, in harmony with his inmost self-law and conducive to his proper line of self-unfoldment.

MANY-IN-MANY

Potency : Mutation

The Many-in-Many is the organic continuation of the Many-in-One. Once a creation is manifested, its unfoldment of growth, change and reproduction follows. Many-in-Many is the formula for this development and thus denotes all processes of transfiguration. In each element of the Many (in any creation) there are latent additional Manys, multifarious resources and possibilities of progressive becoming. The formula indicates the evocation and actualization of these intrinsic potentialities: the process through which the Many become different Many. This dynamic development is of an intradimensional order, that is, the potentials evoked belong to the same dimension of existence as the initial formation belongs. The original status is changed without thereby effectuating a transcendence of this creation's level of consciousness: no new level of consciousness is induced from its native plane or deduced from its involved state in which it is present latently in the initial manifestation. As the formula expresses: the many develop into different *Many*, and not into a new *All*, that is, into the fullness of a fresh dimension.

The status of the Many-in-Many, *potency*, embraces all dynamism which underlies and produces development and change. This dynamism is threefold: the potency to change one's mind, to discipline, organise and control one's mentality and its activity; the potency of the mental receiver and creator to be plastic, open and effective in all thought processes, to be a pliant and powerful channel and instrument for the actualization of all implications and possibilities inherent in the objects and movements of the mental activity; the potency inherent in mental formations and movements which encompasses all inner resources of the thought-objects and all energies which accomplish aurological dynamics.

The dynamis *mutation* realizes all potencies and therefore encompasses all intradimensional processes of alteration. Self-mutation is the agent for a plastic regulation of our mental receiver—its diverse focussing of and vibrating with the objects and influences of

mental life and their potentialities; its adaption and adjustment to any situation, task and change of circumstances. While all-mutation is used by the mental creator as the procedure and dynamis for the realization of the unfoldment, metamorphosis and reproduction of formations. Once the essence of a creation has been incarnated, all-mutation elaborates this embodiment in detail, perpetuates and expands it, and reincarnates its essence in other embodiments.

The practice of the seventh aurological movement begins with self-development and self-mastery: the ability to control the mind and its activity, indeed a very difficult achievement. It implies rejection of the undesired, the perturbing and hampering influences, the wave-lengths of the past, of falsehood, division and illusion, of the lower levels of consciousness, so that the vessel is emptied for the higher to be poured into it: the channel becomes free to admit the frequency-ranges of the future, the emitting stations of the truth, the vibrations from the higher Spiritual Mind planes and from the logosphere.

To the rejection of the lower we must add the ordering of all mental activity, the harmonious and truthful arrangement of all mind-contents and thought-dynamics. This is achieved by integrating and structuring around our highest ideal, our most luminous wisdom and our inmost truth, all those elements which need not be rejected, as they are valuable and necessary aids, instruments and achievements for the development of a truth-conscious mentality. The right relationship between these elements in the light of the fundamental principles of the integral Reality has to be established by giving priority to that which deserves it, by giving all constituents their proper position and role, by harmonizing and interrelating all components. Through this self-discipline the mind becomes a pure and clear vehicle, a well-organised instrument of the truth, where all movements and things form a cosmos—not a chaos.

Instead of being lived by the ceaseless circling of the mental activity, instead of being tossed like a cork by the billowing waves on the surface of a sea, the mind has to progressively become the master of its activity, the real actor, the deciding and governing navigator, steering the course of its own will, the will of its inmost truth. Our attention must focus on the thought-activity itself, observing and discriminating at first, and then acting on behalf of that vision in the effort to establish a truth-harmony and a truth-control of our mentality, to harness our creative drive and formative thought-process and labour of understanding to our highest ideal. A training of the mind that focusses solely on a powerful and efficient mental activity is naturally incomplete without the right control, the mastery over the powers of the mind. This generally neglected inward-going aspect of mental education is given its due importance in Aurologic. In order to advance on the path of truth-thinking, it is imperative to direct much effort to observe discriminatingly one's mental *état d'être*, to reject, to order, to control—to obey the highest truth, and that alone.

This mastery includes thinking what we want, how we want and when we want. It culminates in being able not to think at all, to silence the mental activity at will: thus, to have the ability to press the on and off button on our mental receiver when we like. This silence is, of course, not negative, *tamasic*, dull and inert, but a wakeful, meditative quietness, a fullness out of which any experience can emerge according to the need of the moment, and which allows us to transcend the identification with the limitations of our physical being, to

merge into a wideness beyond and around it, as well as to dive into the depths of our inner being. Such a concentrated silence, transparency, also prepares the ground for the opening to the higher sources of inspiration and influence, to the higher levels of the Spiritual Mind.

This self-discipline prepares our mind and its faculties for a powerful, concentrated and truth-obedient activity. It gives us the inner poise from which we can take the next step: the plastic regulation and adjustment of our mental receiver in order to sound, to contact and to adapt to the inner potencies of, on one hand, our own consciousness, and, on the other, any formation and happening which we have to confront and deal with.

This process of self-mutation harbours the dynamic counterparts to the Many-in-One's openness and receptivity, namely, resonance and attunement: the flexible directing and changing of the type of receptivity, the creating of new openings, the regulating of the resonance-scale of our consciousness. We must be able to diversely focus our mental aerial, to freely select a certain frequency. The process of attunement enables us to move along the scale of different vibrations emitted by the inner potentialities of the diversity of existence. As a radio has to be attuned to the specific frequency of a broadcasting station and can be attuned variously, moving from one frequency to another, from one emitting station to the next, in the same way aurological attunement seeks to play up and down the frequency-scale of the mental receiver, enabling it to resonate with the radiations and potentialities of the inner realms of our consciousness and the secret levels of the mind as well as of any object of knowledge, any being, thing or event. The mind must learn to adapt to any frequency with which it is confronted, pliantly to attune to any circumstances and tasks, subtle and material realities, to adjust to any change of wavelength.

Receptivity is to open the portals of the mind so that things can manifest in it. Attunement is to move from one door to another and to choose the appropriate entrance according to the nature of the guest which is to be received; or, in case no such gate can be found, to create it, to hew out an auspicious opening in the walls of our insensitivity and incapacity. (In the latter case, receptivity and attunement evidently cooperate.) Receptivity is to be open to the note of consciousness which a thing emits, with which it sings its unique contribution to the chorus of the universe. Attunement is to move along the keyboard of one's consciousness and to play this note, to resonate in harmony.

This attunement, this resonance with potencies is the initial stage for their actualization. By contacting them, concentrating on them, resounding dynamically with them, we awaken the inner potentialities, evoke their power for realization, stimulate their development. The focus is brought onto concrete lines for their possible unfoldment, and practical ways for this are opened; for by resonating with a potency, we automatically bring it into contact with our whole being. Out of the complexity of our existence can then emerge the right connection which provides a possible channel or vessel for the potency's progressive material realization.

This takes us to the formative process of all-mutation, which follows the materializing work of self-expression. Once the truth which Aurologic seeks to incarnate has been given a form, one continues to dynamically realize all inner and outer possibilities for the perfecting of its embodiment, to develop its resources and implications, its full interaction with

other truths on the same level. It is evident that no clear demarcations can be drawn which mark the end of the Many-in-One's labour and the beginning of the new phase of the Many-in-Many. The dynamic third aspect of Aurologic, the Right, is the most fluid and plastic domain, where all is in constant interacting motion. To materialize an essence is in general a process of many changes, re-creations, refinements. This is a borderland where manifestation and mutation cooperate, where they merge into one another.

Hence, once an essence is first materialized, mutation comes into play for a further perfecting of this initial embodiment. It progressively refines this incarnation, fashions it into an exact replica of the essence, subtilizing the outer sheath so that it becomes ideally a translucent glass, a window opening to the inner soul-reality. The aim is here to blend the inner and outer being as perfectly as possible—the inner being becomes more and more materialized, the outer embodiment is made increasingly subtle, and both fuse together as a concrete yet transparent whole.

Once a creation has gone through the process of refinement, we can naturally reproduce its embodiment in many replicas, a common procedure in all mental life. It is most ostentatiously applied in the publication process, which makes available to many readers the creation of one, thus giving his work a wide impact. This multiplication of the outer sheath secures the continuity of existence and preservation along the flow of time for a formation. The action-range and impact of the essence is in this way tremendously catalized and expanded. For example, a mathematician has made a discovery of an algebraic relationship and proved it. Every student of mathematics profits from the reproduction of this relationship and its proof. He is spared the gigantic labour of making the discovery by himself and can use the reproduced embodiment as a means of penetrating the essence. The process of reproduction is clearly one of the main agents for the building up of human culture and its progressive evolution, as it causes a mutual enrichment of exponential dimensions.

The next step leads us to the principle of rebirth on the mental plane. All change which transfigures an embodiment beyond its detailed elaboration of refinement and perfecting, is a process of reincarnation; for it actually clothes an inner being in a different and therefore a new sheath. The same essence can naturally be immanent in the most variegated habitats simultaneously. The whole existence is after all the diverse embodiment of the one Spirit-Reality. Therefore, all change is obviously but a new incarnation of this Reality. Regardless of whether the transfiguration is accomplished on an individual, cosmic or supra-universal scale, the principle is always the same: metamorphosis is reincarnation. This mental rebirth and manifold incarnation can serve to adapt a truth to the mentality of different cultures and civilizations or to the various branches of knowledge in general, and to tailor the embodiment of the truth to the state of the evolving human mind in different epochs. The simultaneous incarnation of an inner being in many forms of expression and implementation makes for an integral realization of all its multifarious potencies, and for the cultural variety which reflects the polyphonic riches of the cosmic play.

To realize these three aspects of all-mutation, the Many-in-Many is coupled—in the same way as in the case the Many-in-One—with each one of the first six aurological move-

ments respectively so that the dynamic process of mutation can be directed towards any specific type of change or development.

Elaboration, reproduction, reincarnation also correspond, as in the preceding aurological movement, to three aspects of the eternal's time-process. In the Many-in-One we have dealt with the linear succession of productivity, with the multidimensional global succession of variety, and with the syntropic succession of originality. In the dynamic domain of the Many-in-Many, time metamorphoses from a serial succession into a continuous progression. We have the syntropic progression of elaboration, the quantitative one of reproduction and the transformation variety of reincarnation. The syntropic progression of refinement corresponds to development and growth; the quantitative multiplication to continuity and expansion. The variety of transfiguration is of a twofold nature: first, variety within the boundaries of one category of incarnations; and second, manifoldness also of the class of materialization. It is thus congenial with the two sides of rebirth—its universal aspect of many categories, of multiple development and its individual facet of many incarnations of one type, following a single line of development. We have again the three elements of quantity, variety and originality, only they are here of a more dynamic nature; they are attributes of becoming, instead of properties of being.

The Many-in-One gives to every truth-thinker the liberty to unfold himself, to follow his particular line of growth and practice, to develop and experiment with his own individual system of logic. The Many-in-Many adds to the first cornerstone of freedom, the second of plasticity. Mutation is Aurologic's dynamic aspect of readiness to change, to leave behind the established and achieved, if the call for the new, the future arises, if today changes the situation of yesterday. The spirit of infinity and eternity of truth-thinking evidently does not go together with a stereotyped application of the aurological movements, set up once and forever. As elucidated earlier, the wideness of our logical framework can be freely determined according to the requirements of each task (x-in-one logic). Moreover, the infinity of logical alternatives and solutions to a problem which the All-in-All provides, enables a plastic confrontation of any task and situation. The dynamism of development, growth, metamorphosis is fully taken into account in Aurologic. The ability to be a plastic tool for the revelations of the moment, the capacity to adapt to any alteration of the given circumstances, the fiery urge to progress constantly, to try out new things and follow the sudden vistas which can open at any time as doors into the unknown, the evocation and development of great flexibility, rapid adjustment, instant metamorphosis and constant growth is the hallmark of a plastic and potent truth-thinking: the mature Aurologician is faithful, pliant and supple clay in the modeling hands of the logosphere, the forming fingers of the truth. Freedom and plasticity are the first two legs of the tripod of creativity, the seat of becoming, of which Aurologic is installed as a priestess of the oracle of the future.

A concluding focus on the implementation of the Many-in-Many:

The mastery and control of our mental contents and activity through: rejection of hampering, dividing, illusive and false influences, of the lower levels of consciousness, so that the mind becomes an empty vessel into which the higher, the future, the influence from the logosphere can be poured; arranging, harmonizing and controlling the mental processes and

elements in the light of our deepest wisdom, highest ideals and inmost self-truth in order to make the mind a well organized and disciplined instrument of the logosphere, a master over the mental faculties and powers who can decide when, what, how and if to think.

The inner process of self-mutation: the attunement to and resonance with any vibration emitted by the multiplicity of existence through a free tuning to any frequency by the mental receiver, a diverse focussing of our mental receiver on any emitting station, a flexible adjustment to any change of wavelength. The activation of inner potentialities through attuning to and resonating with them, thus evoking their impact and power, and awakening and stimulating their self-unfoldment, their dynamic actualization.

The outer process of all-mutation continues the actualization of the inner potencies. It elaborates an embodiment in detail, refines and perfects it, subtilizing the outer sheath and materializing the inner soul-reality until they are fused into a transparent yet concrete whole. Then it reproduces this refined embodiment in many replicas. And it transfigures a formation through the reincarnation of an essence in various types of materialization. These operations are realized by combining mutation with each one of the first six aurological movements respectively. Again, the resulting achievements are quantity, variety and originality—this time, however, in the dynamic domain of becoming, of progression.

To a free, individual logic is now added a plastic and adaptive one of readiness to change, to be very flexible in one's approach, to adjust to any alternation of circumstances; of ability to grow, to try out the new, to react to the call of the future, the revelation of the moment; of plastic obedience to the influence of the logosphere.

MANY-IN-ALL

Transcendancy : Volution

The last aurological movement, Many-in-All, deals with the actualization of all inter-dimensional potentialities. It thus fulfills the two preceding stages of the creative cycle. The Many, that is, any being or creation, realizes the interdimensional potential involved in it, transcending its level of consciousness, and evolves towards the plenitude of the next existential dimension. This new dimension is activated from its latent state in the Many, and equally it descends from its native plane into the Many to work as the leverage for their ascent to this new All. The formula Many-in-All denotes then the continual self-transcendence of the Many, which upon reaching the plenitude of an All, evolve into the next higher dimension until they reach also the wholeness of this one, ad infinitum. Equally, the formula describes the inverse movement, the devolution from the higher dimension to the lower dimensions encompassed within it: the numerous latent potentialities of an All, the Many, are developed from the potential state, are dynamically actualized, again in a chain reaction. In general, the Many-in-All can therefore be defined as the dimension leap by which anything moves up and down the hieratic continuum of existence, devolving or evolving from one of its subsystems to the next higher or lower level: the All devolves the Many involved in it; and the many evolve towards the fullness of the All.

The dynamic *volution*, comprises all those transformations which bring about an inter-dimensional change of the mind's status, mode of functioning, activity and output. Volu-

tion is the "overterm" which encompasses devolution, involution, evolution and revolution. Devolution is the movement from a higher to a lower dimension: a being actualizes progressively all the subsystems contained latently in it, developing all its interdimensional possibilities. The inverse motion is evolution; an evolving reality realizes always vaster and more conscious dimensions. Involution is the link between the former two. Evolution is possible because the whole is always involved latently in everything. Consequently, the next higher dimension is latent in the next lower dimension; and inversely the subsystem is involved in the supersystem. Revolution is the intensified and accelerated stage of evolution and devolution, the precipitating movement of the actual dimension leap—the stage in which the actual breakthrough from one dimension to the next occurs. To "volve" is, then, to ascend and descend from one dimension to the next in the mind's self-development, in all its activity and creative output—dimension means here any fixed system, cycle or grade in a hierarchy. And volution also integrates all these cycles and systems into an all-inclusive movement of becoming. It is therefore the dynamis for all interdimensional growth: the transcendence and perfecting of all aspects of mental life.

Transcendancy is the clear result of the volitional process. Aurologic seeks first the transcendence of the very nature of the mind: its evolution into a mind of light by means of a revolution of the rational awareness, the physical brain-mind and the mental activity. The second transcendence of the range of the mental receiver includes a fourfold interdimensional development: the evolution of the mind's dimension of consciousness, world-dimension, time-dimension and dimension of delight. There remains the transcendence of the mental creator's dynamic and formative thought-process, in a triple interdimensional unfolding: the continual surpassing of the level of consciousness of the essence of a creation, so that essences from ever higher sources of truth are materialized; the evolutionary perfecting of the embodiment through which the outer sheath also becomes increasingly suffused with a higher degree of consciousness; and the evolution of the mind's process of creation itself, which thus also increases in perfection and truthfulness.

The practice of the Many-in-All founds itself on the quest to transcend the mental nature through the endeavour to evolve the rational and physical intelligence into a mind of light. To achieve this goal, the mentality developed in the past has to be transformed and new-created. For its illusive and half-knowing, an enlightened and wise, truth-conscious modality has to substituted; for its dividing and fragmentary, a unitive (unity in diversity), integral process; for its abstract and superficial, a concrete and penetrating, transparent functioning; and for its restricted and rigid, a free and potent, creative operation. This transcendence includes the evolution of the rational consciousness, of the physical brain-mind and of the mental activity and its output.

The revolution of the rational consciousness seeks to replace the mind's material orientation with a spiritual one. The rational intelligence is materially oriented—a downward gravitation towards the inconscience and ignorance out of which it first emerged—because it bases itself on the physical senses and brain and the material environment for its processes, its data, its bits of information, and constructs with these its often conflicting mixtures of ignorance and half-knowledge, with the result that it puts mere bits of knowings and accu-

mulations of data in place of illumined and genuine knowledge. The truth-mind relies instead on the influence of the logosphere and on its agents, the six supraphysical senses or organs: truth-intelligence and truth-conception as faculties of enlightened understanding and potentialities evoking imagination; truth-vision and truth-hearing, which replace linear abstraction and verbal rationalization with intuition and inspiration; truth-resonance and truth-experience which gives us a direct contact, identification and revelation of an object of knowledge, instead of a cold and chimeric objectivity based on division and illusion. Also, the source of information and field of investigation is naturally not restricted only to the material world but extends to the whole Reality, the integral continuum from Spirit to Matter; hence true, in-depth knowledge is bound to be the outcome, a genuine all-embracing enlightenment. The mind is freed from the narrow confines of material data and information-bits and expands its power of receiving, processing, and transmitting knowledge into multidimensional infinity. The aurological thought-process deals with *wholes of information* which are a synthesis of the spiritual, the occult and the material.

This revolution of the mental consciousness further strives to substitute the rational orientation towards abstraction with an orientation towards concretization of the profundities and fullness behind the appearances. The knowledge to which the rational modality attains is highly indirect and superficial. It is the result of an abstraction of the concrete, subjective or objective reality, and generally of the material reality and the appearances only. These are reconstructed in a linear and complex procedure—that is, in a very indirect approximation—on the conceptual level; a procedure which often leads to an entire division of the actual reality. And even the concepts reflect only the surface and not the many-layered depth of the inner being. Further, the rational knowledge is gained through reduction, through an analysis of the parts of the whole which does not—or only insufficiently—relate them to the totality and to each other without considering the oneness and the multidimensionality of being, without regard to the synergistic effect and syntropic nisus, the involved All-potentiality and central inner programme. In its dividing and differentiating action, unity, infinity and eternity are reduced to mere aerial, lifeless ideas, abstract concepts, and are liable to be utterly neglected; all focus concentrates on the fragment and the section, the finite and the temporal. Lastly, the rational knowledge is highly rigid and repetitive and much hampered by the scission between reason and volition, life and mind, idea and reality. It lacks the adaptive flexibility and effective dynamism for the implementation of the truth, the beauty, the ideal.

On the other hand, the truth-mind is oriented towards concretization, towards the in-depth knowledge of the object of inquiry, which is grasped in substance, in real-ideas and and real images, permeated with the being and the vibrations of the object or subject, evoking and revealing its true nature and plenary reality. Its task is not to abstract, but to render concrete the subtle, the inner, the infinite and the eternal: to find and contact and unravel them everywhere, to incarnate and express them, to truthfully and overtly infuse and interweave with them all temporal and delimited, particular and material phenomena. The aim is to arrive at a direct knowledge which grows in intimacy, evolves towards a knowledge by identification, a grasping of the whole and a penetrating of the depths. Through the progressive realization of integrality, transparency and creativity, by dynamically and concretely relating

everything to the fundamental truths and principles of Reality through the practice of Aurologic, the mind becomes an obedient, docile and powerful instrument of the light, a creative agent of the new consciousness and is thus really capable of participating in our self-development, self-realization, self-perfection, our metamorphosis into a new truth-conscious, human being—the next stage in the course of our evolutionary self-transcendence.

While the reason is past oriented, building all its knowledge on the achievements of the past, and only on this basis advancing towards the future—a future which is therefore an extension of the past, another floor added to its building—the truth-mind founds itself on its knowledge of the future and seeks to receive and incarnate the messages and lights of this future, which is not merely later in time but more highly evolved in consciousness. Into these structures of the new consciousness are then integrated the achievements of the past, in so far as this is desirable breaking the out-dated molds of the past but keeping safe its eternal genius. The future is no longer the progressive extension of the past, but its transcendence—a new and higher dimension which refashions the lower level in its image, transforming it into an expression of its own self and nature. A new building of a higher dimension is created into which all useful materials of the old structure are incorporated. This future-orientation is indispensable in the present transition of terrestrial evolution to a new aeon of man's advancement to a gnostic supermanhood.

Besides the methods already outlined for an opening to the future, there is a further faculty which goes hand in hand with the six organs of the logosphere, and which complements them. It is the equivalent of our memory, that is, truth remembrance, a memory of evocation based on the oneness, allness and manyness of all being and becoming. Such a memory obviously transcends the remembering of facts stored in the backyards of the mind. It becomes the remembrance of what we truly are in the plenitude of our reality. The whole is in us and we are the whole. To remember is then to activate the potential all-memory in oneself, the remembrance of the one central fact stored in our spirit: the whole Reality. We can remember the future because we are the future, and we can memorise the past in the same way. An integral, transparent and creative truth-memory is possible simply because the whole is "stored" in us. Truth-remembrance is the awakening of the latent unity with all, the evocation of the one awareness which links all things—in the unity of the world continuum as well as in the unity of the time continuum, which are but two different modes of the one underlying Reality. The truth remembrance works by activating from the potential totality of knowledge immanent in us the one facet of the innumerable facets of the whole on which we concentrate in a given situation. All knowledge is within; to actualize this potential inner knowledge is to truth-remember: to free oneself from the chains of the abstract memory of divisions and illusion, and to develop in us the concrete memory of unity and truth, the multi-dimensional contacting of any cell and movement of our body of wholeness. This is one of the secrets of knowledge, one of its most profound mechanisms: to know is but to remember the wholeness that one is in an evocation of the all-knowledge that resides within us. The source of wisdom is always present, we have to learn to tap it, to focus and concentrate on this source.

Truth-remembrance seeks thus to substitute the memory of storing with a memory of

evocation which functions through a relating of the mind to any facet of its potential all-knowledge. This memory of an increasing contacting and experiencing, of a growing revelation and identity works as a computer through the connecting of circuits. It links the circuit of the mind with the circuit of the object of remembrance by means of the right concentration, the exact and intense focus as a force-line which provides the channel for receiving the impulse of the object of truth-memory. Evocation and relation are the key-operation for the developing of a truth-remembrance—the adequate memory for a truth-consciousmentality.

It is evident that such a truth-remembrance in order to fully flower requires that the fourth dimension can intensely and freely work in a perfectly receptive, plastic and potent instrument. A beginning, nevertheless, is clearly possible and the increasing interest taken today in the future signals that an evoking of its reality in our consciousness is in fact taking place. This commencement of a truth remembrance is more in the nature of the large lines of development, the central patterns of evolution which emerge, the possible directions of unfolding, the potentials pressing to realize themselves in the future—thus a general, though concrete, vision of the future and its movement of becoming, a gazing at the silhouette of tomorrow.

An orientation towards the spiritual, the concrete and the future thus characterizes the luminous truth-conscious mind, and must replace the contrary orientations of the rational intelligence which cause its deficiencies and its incapacity to be a leverage for our further evolution.

So far we have dealt with the revolution of mental consciousness. If, however, this is to be effective in all walks of material life and serve for practical comprehension and action on the entire spectrum of knowledge, the material base of the mind has to be transformed into a vessel and vehicle which is really capable of expressing such a new mental consciousness fashioned by the power and from the substance of the logosphere. The physical brain-mind itself has to be transformed into a "river-bed" for the supramental stream, into a research- and communications-network reflective of this higher dimension, a network which can adequately house and serve a truth-conscious mentality.

The human brain contains about ten billion cerebral neurons of which only a marginal part is used: less than ten percent according to generous estimates; some experts put the figure even at one percent. These cerebral neurons function through the links, the synapses, which are established between them, that is, through the activation and utilisation of their afferent and efferent fibres (a neuron's various physical channels for input, the dendrites, as well as its single channel for output, the axon) for the receiving, conducting and communicating of impulses, the synaptic connecting of circuits. Besides the fact that a minimal percentage of the cerebral neurons are active and productive, they are further limited through the way in which they function, as this mirrors the nature of the rational intelligence and so also its shortcomings. We have many linear connections which are not interrelated and harmonised, and are often even conflicting. There are different closed circuits which are divided from one another and fragmentary, or follow monotonously and rigidly the same pattern, making it easy for the mind to repeat the old pattern, but hinder the going beyond into the new. The function-

ing neurons are therefore prone to destructive interference, to be out of phase, out of harmony, unity and concentrated focus.

What needs to be created is, in scientific terms, a constructive interference of unity-in-diversity, of global interrelation and synthesis, of creative, powerful and progressive concentration, so that the brain cells are in truth-phase with one another. The result would be a synergistic effect of exponential dimensions, as the following physical analogy reveals. The same number of photons which produce the light of a ten watt bulb when out of phase with one another, would, if this destructive interference is transcended by a constructive interference, form a laser generating more energy than on the surface of the sun.²¹ The nine movements of Aurologic constitute the archetype and arche-power for the truth-synapses between the neurons which have to be established in order to transform the brain into a physical vehicle of a truth-conscious mentality, a mind of light. By practising these movements we create corresponding cerebral connections of the same pattern in our brain, bring the neurons into truth-phase with one another, thus building up a unified and simultaneously diversified, global and multidimensional, dynamic and creative network which is a natural physical basis for an illumined mental counterpart to the fourth dimension of consciousness, the supermind. And this also stimulates the activation of the inexhaustible potential of the billions of unused neurons as one of the natural results of a constructive truth-interference.²²

Complementary to the active generation of a cerebral truth-network through the implementation of the aurological movements, is the triple inner concentration of opening, aspiration and stimulation. By opening our brain-mind to the light, force and delight of the logosphere, by being receptive to its influence and guidance, by attuning ourselves to its mode of working and resonating with its mode of being, we enable the supramental principle to refashion the brain-mind not only in terms of the procedures of the lower, linear dimension, but also in the integral way of the higher dimension; that is, by an accelerating movement, a dynamic change, not step by step, but globally, at numerous places simultaneously, in the large sweep of a multicentred, wide-expanding intricate process. In other words, we cut short the strenuous and enormously time demanding, almost impossible operation of forming this truth-network only by means of our active thought-process and its linear, one synaptic link after the other progression. To use an image, instead of creating a geometric plane by adding one tiny strip after the other, we invoke the higher dimension of the plane itself and so the plane materializes, to a certain degree, everywhere simultaneously—"to a certain degree" since we are in the lower dimension and also bound by its laws. In practice, there is a mingling of the working methods of both dimensions, where at the beginning the lower dimension predominates but where the higher increasingly gains momentum.

A further inner leverage which accelerates this development is the power of aspiration, an ardent urge and profound longing for the achievement of a mind of light, a mental love for the truth—a being so much enamoured of the eternal and infinite, that it wants to intimately contact, experience, play and unite with them in all parts of its mental being, and so also with the brain. The power of true love and aspiration acts as a strong magnet which attracts the object of longing irresistibly.

Lastly there is the method of inner stimulation: to imagine the growth of the cerebral

truth-network vividly and dynamically, to stimulate one's brain with vibrations of love as well as with a concentrated volition directed towards this growth. This autogenous training underlies the same method which has proved so successful in the teaching of animals and the conscious growing of plants. Surely our brain reacts as well to the evoking and fortifying vibrations which it receives with collaborative effort and goodwill.

A catalysing effect is induced through the feedback and flow forward between, on one hand, the inner concentration-method of stimulation, aspiration and opening and, on the other, the practice of truth-thinking and Aurologic, the active development of the brain through the flow of information and the creative unfoldment. One enhances the other, complements and intensifies it; a mutual generation of progress results which throws down the wall between inner and outer procedure in the wholeness and unity of a constant projection and reflection of one aspect in the other, an interaction which finely attunes all the neurons, the musicians of the cerebral orchestra, so that its symphony of impulses and rhythmic dynamism of synapses resonate with the music of the spheres of truth. As the Mother describes, a limitless fulfilment results from an integral concentration: "The power of the human intelligence is without bounds, it increases by concentration, that is the secret."²³

Revolution of the rational consciousness and of its physical base are completed with the revolution of the mental activity. This adds to the aspects of consciousness and matter a third element: energy, the dynamism of mental life. Out of the perfect symbiosis of these three elements emerges the mind of light, embodying in its very structure the synthesis which it seeks to accomplish in all receiving, processing and communication dynamics, i.e., the organic interrelation of this trinity into a single whole, overflowing with the joy of their mutual enrichment and happy communion. Awareness, substance, energy, joy—such then is the quaternity which the mind of light unites in itself. A truth-conscious mentality impregnated in its being and functioning with the logosphere, the fourth dimension of consciousness, can naturally not rest content with three-dimensional structures and dynamics as its field of action. It must necessarily be instrumental for an understanding and a creation which reflects, which incarnates, the higher dimension of the truth. It must recreate all aspects of human culture in the light of the logosphere, as a manifestation of its integrality, transparency and creativity. Only a new knowledge and a new life can satisfy a truth-mind; its entire élan cannot but be directed towards the creation of a new world, that is towards serving as one of the channels through which the world of the truth is actually beginning to come into existence upon earth.

The transformation of the mind's nature so that it becomes a truth-conscious instrument of the light leads to the evolution of its two central operations: reception, which includes all input of knowledge and enlightenment, and creation, which embraces all formative activity of processing and communicating the mind contents. The first operation is, again, the province of the mental receiver, the second that of the mental creator.

The interdimensional development of the mental receiver seeks to transcend the range of its source of input and action-field of being and becoming. This is an extension of the Many-in-One's openness and receptivity, and the Many-in-Many's attunement and resonance, which are completed with ascent and descent—their counterparts in the Many-in-All. To be receptive is to open oneself and respond to an "emitting station", to the vibrations

which a reality emits, to its inner programme and movements of consciousness. To attune oneself is to move along a specific dimension of reception, to select any desired reality on this range and to resonate with it. To ascend and descend is to move up and down from one dimension of reception to the next—and to link these dimensions in a unified field. All these three operations co-function and interpenetrate in the reception process. So, naturally, no clear-cut borders can be traced between them. There are four basic reception-domains in which these operations have to be performed: the mind's dimension of consciousness, its world-dimension, its time-dimension and its dimension of delight.

Ascent and descent in the first domain effectuate the dimension leap in the universe of mind with its many levels of consciousness beyond the reason, e.g., higher mind, illumined mind, intuitive mind, and overmind in the terminology of Sri Aurobindo, who also named the whole complex the spiritual mind. This extrapolation upward is complemented with a projection downward in the mind's dealings with life and material existence, with all aspects of culture and world-action. The truth-mind thus advances in both directions, towards the most practical and material as well as the most subtle and spiritual, and seeks to connect all layers of this spectrum in the light of the truth, striving for an integral movement of becoming in which all levels of consciousness participate and enrich each other through their interaction, unification, and complementarity.

The mind of light is the direct delegate of the supermind in the intelligence, from the physical mentality to whatever level of evolution an individual mind has reached: reason, or higher mind and so on. This direct link between the present human reality and the supramental serves as a tool for the latter in all domains of knowledge and life, which are thus influenced, permeated and shaped directly by the fourth dimension, however subdued, restricted and limited its action may initially be. The representative of the logosphere in the noosphere is one of its crucial agents for a radical transformation of the first, second and third dimensions in terms of the fourth dimension. It can be likened to a helping hand from above which reaches down to transform us and lift us up, thus bridging the vast stretch between ourselves in the middle of the third dimension, and the fourth dimension. The ambassador from above accelerates our self-transcendence immensely, as this would otherwise have to be postponed until we reach the peak of the third dimension, the overmind—something which would require a tremendous length of time in order to be reached by even a minimum-sized representative group of the human collectivity.

Besides the direct action it has on all culture and life, the influence of the logosphere in the mind functions as a propelling power for the mentality's ascent to one layer after another of the spiritual mind, until the delegate from above can regain its native plane, the supermind, with the result that the human mind has been radically transformed and elevated to the fourth dimension. The mind of light not only facilitates this ascent and enhances a commerce of the human mind with these various levels, it also changes the nature of the ascent. Instead of losing contact with the material life through this ascension, the connection is preserved. An organic link between the most physical mentality and the spiritual mind up to the supermind is fashioned and maintained. The fourth dimension thus interconnects dynamically all the lower dimensions, overtly reveals the continuum of substance, energy,

awareness and joy, synthesises the physical, vital, mental and spiritual. The material world is not lost in the delight of the spiritual heights, and the material life—thus transformed, divinised—is organically united with the spiritual heights: earth and heaven are made intimately one. The first task of the truth-mind is then to expand the mind's dimension of consciousness upward into the spiritual mind, downward into all domains of life. Its ascent and descent on the ladder of consciousness links all its various degrees, works for a simultaneous possession of all levels, an integration of all domains in an all-inclusive fulfillment.

The next field for the mental receiver is the world-dimension. The truth-conscious mentality opens before us new realms within and without, enhances our conquest and extends our knowledge of space: the physical space of the material universe as well as the subtle ether with its many supraphysical worlds. The second set of three movements of Aurologic deals with this development of an increasing intimacy with infinity, the relating of all delimited phenomena to the limitless, the growth towards multidimensionality, the interdimensional linking of everything to everything else, the concretization and harmonization of the spiritual, occult and material domains. The aim of ascent and descent is naturally to synthesise the various world-levels, to organically link all systems and to dynamically move from one to another world. (World obviously means here any system, e.g., the atomic or nuclear or stellar world, man's psychological realm, the world of dreams, of numbers, the astral systems, the kingdom of the cosmic gods.) The world-dimension of the mind thus expands towards the infinite with its many infinitudes, towards the whole existence with its hieratic continuum of worlds from the most subtle Spirit planes to the most dense Matter layers. Its field of learning and creation becomes the integral Reality, which is reflected on the level of the mind.

The third line of ascent and descent is the breaking of the barriers of time, the expansion of the mind's time-dimension. Under the pressure of the logosphere, time has in this century begun to open itself to us, though not to the same extent as the space-dimension. In order to become conscious self-evolvers and world-evolvers, we must project into the future, a need more and more intensely felt, which recently has even given rise to a new branch of science, futurology, and other developments on similar lines, such as, to give only a few instances: the statistical prediction of the near future by means of polls, computer calculations, etc.; the astronomical prediction about comets and other future movements of the heavenly bodies; research into earthquake prediction, ESP faculties. Technology and physical science have begun in this century to extend our time range at an almost unbelievable rate compared to past epochs.

To the field of time, the past, present and future, must be added the nature and laws of time, that is, the structures and dynamics of the eternity-time continuum with its cyclic hierarchy of temporal sublevels. Since the foundation of all time is eternity, only from this perspective is a true understanding of time possible, and therefore also an expansion of our time sense. In the Many-in-One the relation between eternity and time has been touched upon: time was defined as eternity's dynamis of becoming, as its evolutive self-periphery which progressively advances towards a fuller expression of eternity's simultaneity. This evolution towards higher time-dimensions therefore leads to an ever vaster time-consciousness, to a growing embrace of the past, present and future simultaneously. In the same way

as the evolution of consciousness expands the awareness of space towards infinity, it also expands the awareness of time towards eternity.

To each plane of the hieratic continuum of being, then, its equivalent time-dimension of the hieratic continuum of becoming corresponds. Time, like space, is a multidimensional, complex reality with similar structures and dynamics—a whole ontos of its own to be explored.

The Many-in-One has dealt with the successive time-dimension where time has beginning and end, is a series of moments—the counterpart to the delimited, finite and particular world-dimension. We have what we can call on one hand the parts of time, and on the other, the parts of space. The Many-in-Many adds to this the progressive time-dimension, where time advances in an endless line, circumnavigates the fourth-dimensional circle of an "eternitude", whose centre and circumference are one and omnipresent. This dimension is equivalent to one of the infinitudes of limitless being. Instead of parts there are now unidimensional wholes of time and of space. In the Many-in-All's volutive time-dimension, time becomes a movement of consciousness manifesting, mutating, and voluting the inexhaustible possibilities of existence. Each element of existence is nothing other than the whole Reality having another frontal appearance, stressing another facet of the totality—such is the nature of the infinite being. Similarly, volutive time reveals every movement as but a curve through eternity's fullness, a frontal motion of its wholeness. Volute time is the dynamis which gradually reveals the treasures of eternity in evolution and devolution from one dimension to the next in the hierarchy of becoming. In this third time- and world-dimension, we have multidimensional wholes, many infinitudes and eternitudes of various grades or levels. These three time-dimensions correspond therefore to the material, occult and spiritual world-dimensions.

The range of the mental receiver covers therefore the four-dimensional continuum of being-consciousness-force-delight, the same quaternary which is the basis of the mind of light. (Space is extension of being, and time, the dynamics of becoming, is the medium of force in motion.)

This general, very flexible framework gives us the basis for an extrapolation of the mind's time range. A more detailed investigation into the structures, dynamics and harmonies of time requires the same application of the movements of truth-thinking and Aurologic as is the case with space. This, in fact, would mean the establishment of a truth-chronology, a science of time with its various branches, similar to the complex of the different interdimensional space sciences, the cosmologies, astrologies, and planetologies and ecologies required to cover the entire continuum from the most subtle to the most material universes. Aurologic and Auromethod provide us with a possible tool for the mind's exploration of time, for the creation of a mental timeship that could dare the voyage into the unknown, the great adventure of a truth-chronology, a science of the eternity-time continuum.

Lastly, there is the delight-dimension which underlies the former three realms. The expansion of the mind's range of consciousness, space, and time also naturally results in an extension of the domain of mental joy. As the integral Reality in its being and becoming is reflected on the plane of the mind, and as the latter's awareness of the Reality grows in truthfulness—in directness of integrality, transparency and creativity—the divine play of the One-All-Many becomes the source and field of the mind's joy. And the quality of its enjoy-

ment also changes. It is transformed more and more into rapture and delight—a reflection of universal and existential bliss, *ananda*—in the intelligence. Especially in the first set of three aurological movements—and in the whole of Aurologic in general—we have dealt with the Reality Game of the One-All-Many. The play of the Many founded on the immanence of the One and the Unity which includes the most manifold diversities are the endless theme of cosmic evolution, and therefore the inexhaustible source of delight for all truth-thinking. Neither to neglect multiplicity for the sake of oneness nor to pursue the diversity of the Many at the cost of the One, but to bring out the play of both in all fields (in every All) of human knowledge, in all its rich plenitude and variegated wholeness—this is the path of delight on which Aurologic travels. The mind participates in the simultaneous joy of oneness, allness and manyness playing in the multidimensional garden of Reality.

The range of the mental receiver covers therefore the four-dimensional continuum of being-consciousness-force-delight. (Space is a synonym for being, and time, the dynamics of becoming, corresponds to force.) These are the pillars of the fourth dimension, the supermind, which unites in itself those four modes of the one underlying Reality. In the four-dimensional continuum of existence there are these four basic interdependent dimensions which are in turn multidimensional continua: the continuum of consciousness with its many grades of physical, vital, mental and beyond-mental awareness, the infinity-world continuum of being or space, the eternity-time continuum of becoming or force, the delight-continuum of the One's All-play with the Many.

The input of knowledge which ascent and descent in the consciousness-space-time-delight continuum makes available to the mental receiver, is then processed and shaped by the mental creator, whose object is to express the four-dimensional continuum with increasing transparency and perfection. With this, volution completes the work of manifestation and mutation. The first step of Aurologic's third domain, the Right, is manifestation, the very activity of thought and creation: to receive and to embody essences. This is followed organically by the mutation of the mental activity and thought output in a rich play of variation: the embodiment of an essence is elaborated, reproduced and transfigured. The third and completing stride is the transcendence of the mind's creativity and formations through their dimension leap to a new level of consciousness (and thereby also of space and time). This evolution transforms the inner being of a formation, its embodiment, and also the act of creation, which all break through into a new dimension.

The volitional process follows the central pattern of ascent, descent and integration. Volution evokes and activates the interdimensional potentialities which are involved in an essence, thus urging and enhancing its ascent to a new level. This aspiration and upward-pressing from below cooperates with the pressure of the inspiration from the higher dimension seeking to descend, to manifest itself in the lower dimension. Both these movements create a channel for the heightening of the level of consciousness of an essence, which in this way actualizes its interdimensional resources. Such a transcendence of the inner being of a creation is strikingly exposed in an aphorism by Sri Aurobindo, which focusses the same essence of the relation between sun and earth from three different levels:

To the senses it is always true that the sun moves round the earth; this is false to the reason. To the reason it is always true that the earth moves round the sun; this is false to the supreme vision. Neither earth moves nor sun; there is only a change in the relation of sun-consciousness and earth-consciousness. 24

Once an essence has attained to a new level, this subtle reality has to be incarnated; the embodiment naturally also has to reflect this new plane in order to really express the evolved essence in an adequate form. The heightening of a creation's inner being is the prelude to integration, which implies an equivalent heightening in all aspects of the outer sheath, so that the new dimension is made fully manifest. The dimension leap achieved in the subtle essence is thus materialized, given a stable and concrete form. The process of integration molds the embodiment into a transparent vessel for the higher plane, a material replica fashioned in the image of the evolved essence. The higher level filters down into all parts of the creation, which is thus transformed and uplifted integrally towards this new dimension.

An illustration of this is Einstein's Theory of Relativity which transcends Newton's absolutistic framework of space and time not only in essence, as an insight from a higher consciousness, but also in embodiment, for it is established within an adequate mathematical and physical body which materializes the essence in a concrete form. This shows that a creation's interdimensional transformation must always be accompanied by a corresponding transcendence of the creative process. Had the mathematical operations not equally evolved to a new level, it would not have been possible to incarnate the Theory of Relativity. Without Riemann's geometrical system, a proper embodiment for the theory would not have been feasible.

In practice, there is, as in the two preceding creative movements, a combination of volution with each one of the first six aurological operations respectively, so that we have six fundamental procedures to effectuate and regulate the dimension leap of creations. The formative processes outlined for manifestation and mutation apply here too, especially to the integration activity. For, once a new dimension is invoked through ascent and descent, in the essence, integration fashions, elaborates, reproduces, and metamorphoses its embodiment—there is clearly a merging of all these three aurological operations at this stage.

The achievements of the volitional process are once more quantity, variety, originality. As we have seen, in the Many-in-One these three accomplishments are properties of being: a series of achievements. In the Many-in-Many they are attributes of *intradimensional* becoming: a progression of achievements. In the Many-in-All, quantity, variety, and originality are qualities of *interdimensional* becoming: an evolution of achievements towards ever higher levels of consciousness. The dimension leap mounts grade upon grade of creativity towards an increasing richness of productivity, multidimensionality of diversity and newness, quality, truthfulness of individuality. All existence reveals itself the eternal sphinx-riddle which, however often answered, still remains an inexhaustible question. All knowledge grows into a single equation of consciousness with an infinity of possible solutions. All life becomes the delightful playfield for the creation of ever new and more perfect forms in the insatiable urge to embody the formless, to express the ineffable.

A logic which seeks to epitomise the creative processes of the Reality must put special emphasis on interdimensional movement and transformation, as this implies growth of consciousness and an enlargement, a heightening and deepening of the mind. The Many-in-One's freedom of individual logic and the Many-in-Many's plasticity of adaptive logic is completed with the Many-in-All's growth of evolutionary logic. A continual self-transcendence and all-transcendence, an increasing self-perfection and all-perfection, these are the goals of the logic of existential evolution and so also of Aurologic. An interdimensional expansion of the nature, functioning and activity of the mind is the highest aim of truth-thinking: from truth to greater truth, this is the sunlit path of the solar mind of light.

The implementation of the ninth aurological movement may be essentially outlined.

The transcendence of the mind's nature aims at its evolution into a mind of light by means of a triple revolution of the rational awareness, the physical brain-mind and the mental activity. All aspects of the mind, its consciousness, material basis, dynamics—and consequently also the field and nature of its enjoyment—are transformed in the image of the logosphere through the substitution of the models, orientations and lines of development of the third dimension by the ones of the fourth dimension. The mind becomes in this way the illumined counterpart of the supermind, reflecting the latter truthfully, and serves as a direct delegate of the fourth dimension in the third one: an agent which works to transform human life and culture and intelligence into an expression of the truth.

The transcendence of the mind's process of reception is effectuated through an interdimensional ascent and descent in four interdependent reception domains. The mind's dimension of consciousness is extended upward to the levels of the spiritual mind, and downward to all aspects of vital and physical existence which are thus influenced and shaped directly by the logosphere. The mind's space-dimension is expanded so as to include the integral continuum of being from Spirit to Matter, embracing the multidimensional world-play of the infinite. The time-dimension is equally extrapolated, covering the integral continuum of becoming with its successive, progressive and volutive time-dynamics of the eternal. Therefore, the delight-dimension is also expanded: the Mind's field of enjoyment becomes the Reality Game of the One-All-Many. The range of the mental receiver is therewith evolved toward the four-dimensional continuum of being (space)-consciousness-force (time)-delight.

The transcendence of the mind's process of creation seeks an interdimensional expansion of the creative activity. The essence and the embodiment of a formation as well as the creative act are transformed and lifted up towards ever higher planes of consciousness so that they express the truth with an increasing perfection and richness, transparently incarnating the four-dimensional continuum. Through ascent, descent and integration, the new dimension is infused into all aspects of the formation, and also into the creative act itself, as this has equally to partake in the process of evolution in order to be able to deal with a higher plane. Volution, like manifestation and mutation, is coupled with the first six aurological movements to effectuate and regulate the formative dimension leaps. The three achievements of quantity, variety and originality are this time properties of interdimensional evolution.

The freedom of individual logic and the plasticity of adaptive logic are completed with the growth of evolutionary logic, which advances from truth to greater truth in a continual

march of self- and all-transcendence and dynamic self- and all-perfection, in a constant effort to become aware of and to express higher levels of truth.

F. Conclusion

The movements of Aurologic and truth-thinking present a variegated field of action. So the question arises: How to approach the whole, with what to commence? The general approach sketched at the beginning of Part IA, "Truth-thinking", needs for heuristic purposes to be complemented with a point of onset providing the central leverage for all aurological activity. All the logical movements hinge on a triple pivot of aspiration, inspiration and concentration.

Aspiration is a deep urge to transform the mind into an instrument of the light, an ardent need to open one's mentality to the influence of the logosphere, a fixed, intense yearning to contact and serve the truth, to give one's whole mentality to the truth in as perfect a consecration as possible. Practically, in confronting any task, problem or activity, one has to begin by aspiring for the enlightenment and guidance from the logosphere, calling and invoking its influence. It is this ardent and steadfast, silent or formulated call from below that causes the answer of the inspiration from above. What Sri Aurobindo declared about the whole of the Integral Yoga is obviously also true of a truth-conscious functioning of the mind:

There are two powers that alone can effect in their conjunction the great and difficult thing which is the aim of our endeavour, a fixed and unflinching aspiration that calls from below and a supreme Grace from above that answers.²⁵

This inspiration from the logosphere constitutes the inner consciousness-force field for all mental activity and development. Truth-thinking canalizes and directs this current towards all aspects of knowledge and life. It functions as a focussing lens which concentrates in the mind and its action-range the solar rays from the logosphere towards any practical work to be accomplished. And symmetrically, it builds up a mental network, a system of thought-channels arranged according to basic truth-patterns that as *yantras* invoke and incarnate the supramental consciousness-force field. These two symmetric movements are evidently two sides of one coin and mutually enhance themselves through constant flow forward and feedback. Aurological truth-thinking is thus a mental yantra for the inspiration from the logosphere, as it prescribes the fundamental paradigms of a truth-conscious thought-dynamics, the right mental attitudes to be taken, the basic lines of thought to be followed and central truths always to be remembered. This concentration on the central archetypes and arche-powers of the fourth dimension naturally generates an infusion of this dimension in all aspects of mental being and becoming.

Concentration completes aspiration and inspiration. For when the call from below is answered by the light from above, it requires an adequate instrument to process and formulate this inspiration. In practice, one activates through concentration, according to the models of Aurologic, the potentialities involved in the received inspiration. A steady concentration

progressively forms the channels so to fully realize and materialize all implications and resources latent in an inspiration and also increases the frequency of inspirations, for the "aerial" is always tuned to the truth and ready to receive. Aspiration invokes, inspiration enlightens, concentration effectuates, it develops and elaborates, gives form, continuity and stability to the illuminations received and increases and naturalises them. Together, the dynamism of aspiration, the light of inspiration and the stability of concentration are the golden key to truth-thinking.

There is a tenth movement of Aurologic which underlies and supports all the others. It is the foundation as well as the consummation of truth-thinking, the *trimarga* of *satyananda*, the triple path of the delight of truth: the delight of serving the truth, "*satyamkarma*", of knowing the truth, "*satyamjnana*", and of loving the truth, "*satyambhakti*". This solar delight of the mind of light's journey to the fourth dimension awaits the adventurer voyaging towards a new, truth-conscious human being:

Caught in the sun-mirror of the mind of light
Are the luminous winds, the lightning hands
That drive it upward, height upon solar height. 26

References

20. Sri Aurobindo, *Savitri*, Sri Aurobindo birth centenary edition, vol. 28 (Pondicherry: Sri Aurobindo Ashram Trust, 1972), p. 309.
21. Richard P. Ingrasci, "Holistic Systems Analysis: Towards a Scientific Understanding of Structural Integration", *World Union* 16, no. 7, p. 5.
22. A pointer towards an integral activation of the cerebral neurons is *Equals One*, a journal of Auroville, which also reflects a pioneering, experimental attempt in the direction of truth-thinking. See "Child", *Equals One*, no. 2 (1969). Another pointer is, George B. Leonard, *Education and Ecstasy* (New York: Delacorte Press).
23. The Mother, *Mantras of the Mother*, part II (Auroville: Editions Auropress, 1976).
24. Sri Aurobindo, *The Hour of God*, vol. 17, p. 90.
25. Sri Aurobindo, *The Mother*, vol. 25, p. 1. This manual for the opening to and collaboration with Consciousness-Force is a most valuable aid for truth-thinking.
26. Alexander Brodt, "The New Creation", *World Union* 16, no. 2, p. 14.

REVIEW

Toward the Future, by Teilhard de Chardin. London: Collins, 1975.

The Jesuit Order has acted as a catalyst of the Catholic church, and more and more of the members of the order by questioning its indisputable tenets have helped adapt its life and apostate to the needs of the times and thus assured the process of self-renewal. The French Jesuit Pierre Teilhard de Chardin elaborated his own system of thought long before the present concern for the future, and his essays, *Toward the Future*, add another dimension to the study of man's ultimate future.

Teilhard throughout his life refused to accept that reflective consciousness—man's greatest gift—was a mere accident thrown up by nature, totally unrelated to the structure of our universe. He all along endeavoured to integrate this human capacity with the phenomenon of evolution. His view of the future was based not so much on the study of the past as on the searching analysis of the great changes that were being effected in contemporary mankind. In the great scientific, technological and social advances he detected symptoms that pointed to a rebound of evolution and the indication of a deep undertow which was to carry us to the full development of the super-mankind. Underlying all events he discerned the same basic trend: "Progressive unification of mankind, intensification of collective consciousness, birth of socialised mankind and finally movement towards the convergent structure of evolution as it seeks out its cosmic centre". All the past and many present moral attitudes are based upon a faith in a cosmic order which was accepted as stable and inviolable, it was a sacrosanct expression of the creator's will to which man had to submit unreservedly. "Today we see it not as a final inevitable order, but as an order to be designed and created by man himself for the purpose of his fuller development." No religion, divine words, or moral philosophies have arisen out of this new situation, nor is anyone prepared to accept its consequences. Teilhard's approach thus transcends ordinary technological approaches placing in human hands a key to the next stage of the cosmic process.

Teilhard distinguished two forms of humanism. "A humanism of balance of the Middle Ages and the renaissance, which placed man's moral perfection in his conformity with the natural order of the world." Our own age dictates the transformation of a religion of order into a religion of evolution and progress. While on one side he raised the flag of revolt against the existing order of Christian ethics, on the other he believed that "The world will never be converted into Christianity's hopes of heaven unless Christianity is converted to

the hopes of the earth. . . . The sense of man believes in the magnificent future of the tangible world and the gospel seems to despise it. . . ." And between the gospels of many orders, religions and the sense of man there is at present a deep rift. True religion spreads like water or fire irresistibly. It is only because something is lacking and there is contempt towards the realities of the earth, and religion does not have anything to contribute towards the crises of industrial societies and continues to emphasize concepts which have become alien to the soul of man, that this schism has continued to widen. We cannot take the world back from Einstein to Galileo, and those who tried to do it have caught the disease they set out to cure.

Through a process of reflective consciousness, mankind is more anxious about its future and more ready to welcome a saviour. But Teilhard believed that although all through the centuries the East stood for spirit and the West for matter, such a saviour will not arise in the East because "It was in the refined pessimist solution of the world that the soul of Asia was born and found its expression." In India with its metaphysical sense of the divine, the invisible is more real than the visible. Realisation of the divine is only possible through relaxation of tension and not its intensification. A naturalistic and practical sense of the human, and appreciation of man more than the faith in man to pacify rather than to conquer, would appear to have been China's predominant concern and the source of her loftiest aspiration. And the Japanese heroic sense of the collective expressed itself in too narrow a framework, race and the racial; race centred on blood and common origin much more than on spirit and convergence ahead—though oddly complementary—when taken together they do not entirely cover the complete field of perfect spirituality. Mysticism of the individual, confronted by the world, social mysticism, are naturally exclusive, irreconcilable.

He believed that the East has not solved the problem of spirit taken in its complete totality and we would look in vain in that quarter for the dawn to illuminate it. "History and experience both insist that it is in the Western direction that we must guide the progress of life. We must know more and must be the master of more. . . . Individual nations, races and religions, everything will disappear tomorrow which has not today hazarded its soul on the road to the West."

Most of the important writings of Teilhard, including these essays, relate to the period of his prolonged sojourn in China, when China—nay the whole of Asia and the East—was prostrate at the mercy of the West. While the West fought wars to increase its power and influence and enrich its coffers, the East was busy putting together the shattered remnants of old civilizations.

The victory of the so-called forces of reason and the eclipse of the imperial powers of the West possibly further convinced Teilhard that the West was fulfilling its mission in lifting the down-trodden East and starting it on the road to progress towards the converging material and spiritual planes. It was not only the dreamer, visionary and missionary in Char-

din, but also many in Asia who believed that the road to the material West was the road to progress. All the hopes and illusions of Teilhard and others started to disintegrate within a decade after the end of the Second World War. He had hoped perhaps in vain that "every step in the material organisations on this earth will also mean a simultaneous step in the psychic and spiritual domain to balance, humanize and complete it". Perhaps another Jesuit, Jacque Ellul, was right when he questioned "the vanity to pretend that the monolithic technical world that is coming to be can be checked or guided".

It is hard to predict how Teilhard would have reacted to the dilemma of the West and the resurgence of the East at the threshold of the last quarter of the twentieth century, i.e., a few decades after his death. His highways to the future convergence of human consciousness and the tangible material world are littered with the decaying bodies of the victims of polymorphous violence and where not the rule of law or individual or social mysticism of the East or West, but under widening shadows of the balance of terror, the scourged soul of a homo sapiens reigns supreme.

Perhaps Teilhard, by keeping his sights radically oriented to the absolute or the ultimate future of man, his intellect on the human evolutionary processes and his heart on the divine, was helping to provide the coming generations with reason for living and hoping.

J. C. Kapur

A writer and futurologist, Jagdish C. Kapur is the author of India in the Year 2000. Formerly an industrialist, Sri Kapur served as advisor, member, and chairman of various industrial and technical bodies of the government, industry, and international organizations. He is a member of the National Committee on Science, and the Technology Panel on Futurology. Sri Kapur has written and spoken extensively on problems relating to technology and society, and his contributions to numerous periodicals have dealt with a wide variety of topics, including energy and solar energy, research and planning, intermediate technology, art, and the future.

FOCUS

Pandit in Baroda

World Union International's chairman, Sri M. P. Pandit, attended as chief guest the annual conference of the Sri Aurobindo Centres of Gujarat held in Baroda from September 25th to 27th. En route, he visited on invitation the Vivekananda Kendra in Madras, and addressed a meeting convened on the occasion. Speaking on "The Emerging Future", he pointed to the movements that are currently gathering force for the emancipation of women, of children, and of men.

Upon arrival in Baroda, he was taken to Sri Aurobindo Nivas, the building—donated by the government—where Sri Aurobindo had spent more than eleven years after his return to India from England in 1893. Early that first evening Sri Pandit spoke on the ideal of human unity as viewed by Sri Aurobindo, and then responded to interesting questions on political developments in general and World War II in particular. Later he addressed a meeting of the Baroda Rotary Club and explained that integration is the need of the hour. He pointed out how Sri Aurobindo's philosophy and yoga can help effectuate this integration on the personal, social, and international levels.

The conference formally opened the next morning with more than 175 delegates and hundreds of public participants attending daily. The inauguration commenced with a rendering by Vasanti of the Durga Stotra of Sri Aurobindo, and Sri Pandit spoke on the contribution and direction given to world thought by Sri Aurobindo and the Mother. In the afternoon he talked particularly to the centre representatives on the lines on which centres are expected to work in both the spiritual field and in other fields of life touching the general society. That evening he addressed members of a nearby industrial community on the relevance of Sri Aurobindo to modern man, indicating precise lines on which this teaching can help to meet life-situations.

"The Psychic Being" was the theme of Sri Pandit's morning presentation on the conference's second day. He spoke at length on the concepts of the soul, the self, the true personality, and then traced the connotations of the "psychic" in Vaishnava philosophy before focussing on the role of the psychic being in the sadhana of the Integral Yoga. So many questions followed that it was decided to hold a special question and answer session the next morning. That afternoon he addressed a gathering of teachers on the approach of Sri Aurobindo and the Mother to education, drawing particular attention to the fourfold dimension of education in the Mother's view. "All Life Is Yoga" was the topic of the lecture in the evening. Sri Pandit

developed the theme with abundant illustrations from life under the Mother's guidance, and then again replied to queries.

The previously arranged session exclusively for questions was found stimulating, and the topics considered included occultism, sociology, mysticism, philosophy, yoga, and the miracles of godmen. On that final evening Sri Pandit spoke on his favourite subject: the Divine Mother. All present, and the grounds were more than full, found this meeting an especially rewarding experience. The day concluded with devotional music by Vasanti in Sanskrit, Gujarathi, Bengali, Hindi, and Marathi.

The conference over, Sri Pandit paid a visit the next morning to Kayavarohan, where he and those accompanying him had a rare audience with Swamiji Sri Kripalvanand. A centre for yogic research is developing at this enchanting place, and the visit was found to be uniquely worthwhile. Later, Sri Pandit was received by the faculty of fine arts of Baroda University, and briefly addressed the post-graduate students and answered their questions. A quick visit to Aryakanya High School followed and Sri Pandit was impressed by the discipline that prevailed among the students. Finally, that evening, he spoke on *Savitri*, giving a panoramic view of Sri Aurobindo's epic with apposite readings from the text.

Throughout the period in Baroda, Sri Pandit felt a special atmosphere pervading Sri Aurobindo Nivas, where Sri Aurobindo's relics have been installed. A consecrated group of workers are making every effort to keep pace with the centre's growth, and upon request Sri Pandit has offered a number of suggestions for the development of the institution, which he feels may soon become a branch of the ashram at Pondicherry.

On his return journey, Sri Pandit stopped for three days in Bombay where he addressed three public meetings, held discussions with private groups, and was interviewed by the press. Here, as in Baroda, he experienced keen interest in the work of World Union and of Auroville, and a perceptible opening to the message of Sri Aurobindo and the Mother.

THE NEXT FUTURE Progress Announcement—III

Preparations for The Next Future, World Union's triennial conference, now move within two months of its January 8, 1977 convening date. Developments since progress announcements I and II in June and September issues of "Focus" are these: new acceptances of seminar invitations; inaugurator of the conference; and information on the contents and purpose of the conference volume.

New Acceptances

In addition to those announced earlier, these persons are participating, or plan to participate, in the seminar.

Maria Helena de Bestos Freire—Sao Paulo, Brazil: director, Centro de Estudos Yoga Narayana: vice president, International Yoga Teacher's Association.
Rolf Gelewski—Salvador, Brazil: founder-director, Casa Sri Aurobindo, dancer.

Dr. Sisirkumar Ghose—Calcutta, India: professor of English, Santiniketan.
 J. C. Kapur—New Delhi, India: technologist, Kapur Solar Farms; futurologist.
 Dr. Erika Landau—Tel-Aviv, Israel: director, Young Persons' Institute for the Promotion of Art and Science, Museum Haaretz; psychotherapist, educator, researcher in creativity.
 Rohit Metha—Varanasi, India: writer, lecturer, and educationist.
 Rajan Nehru—Allahabad, India: vice president, UN Human Rights Commission, 1976; women's movement and world federal activist.
 Jean Pontius Rindge—Buffalo, New York, U.S.A.: president and executive director, The Human Dimensions Institute; editor, *Human Dimensions*.
 D. S. Seth—Bombay, India: vice chairman, Tata Energy Research Institute.

Inaugurator

The conference will be inaugurated by Sri B. T. Kulkarni, former professor of higher mathematics at Kolapur College, now lieutenant-governor of Pondicherry. He had also served as secretary to Subash Bose and underwent several years imprisonment by colonial Great Britain for the sake of the Indian freedom movement. Then he moved into a position of leadership in the subcontinent's labour movement, became the general secretary of the All India Congress Committee, and at the same time was elected to the Rajya Sabha, parliament's upper house. Sri Kulkarni is a man known for action consistent with his perception, and for a wide-ness of interest, of which that in humanistic movements is prominent.

Conference Volume

To be published in the first week of December, the conference volume will combine three functions: it will take the place of the December issue of *World Union* journal, and be entirely concentrated on the next future; it will be the primary source of background and preparatory material for the conference itself, containing the major papers submitted by seminar participants and others; and it will be the souvenir volume carrying the compliments of those who have shared in the financing of the coming gathering. Included in the volume will be papers by Ervin Laszlo, Beatrice Bruteau, Clayton Jensen, Mary Bailey, and Donald Keys among others. The publication will be sent to seminar members and persons registered as general participants, as well as regular subscribers to *World Union*.

ORGANISATIONAL ACTIVITIES

World Union Centres

Lucknow A seminar on "Nationalism and Human Unity" was organised by the Lucknow centre at Gandhi Bhavan, on Saturday, 18 September. Members of the Gandhi Bhavan, students of Lucknow University, and others attended. Dr. Sitaram Jayaswal presided and emphasised in his remarks that the World Union movement is working for human unity on a spiritual basis; men of goodwill of all nations and religions are welcome to participate in its efforts. Sri Jagdish Gandhi, in speaking of the need of human unity for the world, noted the growing interdependence of nations and said that in the interests of world peace it is neces-

sary to dispose of lingering differences based on colour, caste, class and religion. Sri Ram Pravesh Shastri, secretary of the Gandhi Bhavan, stressed that though most people have accepted the value of nationalism, they are still somewhat hesitant to accept the ideal of human unity. But obviously it is necessary for us to realise that without international understanding there cannot be peace and progress in the world. Miss Anita Dikshit, a post-graduate student of Lucknow University, drew attention to the problem of caste and class tensions in India. Intercaste marriages will help accelerate national integration she felt. She pleaded for making the study of Sanskrit compulsory and thought that it could become a chief means of communication in India. Sri R. S. Jayaswal, an officer of L.I.C., emphasised the need for developing healthy human relationships to realise national integration and human unity. Sri Moredhwaj Varma referred to numerous problems, such as the population explosion and environmental pollution, and said that these clearly cannot be solved without international cooperation. Sri Radha Shyam Ycgi spoke of the present mechanical age and the crisis of consciousness, urging that the problems of life, the nation, and the world must be approached with a higher consciousness and a global attitude. Sri Om Prakash pleaded for practical suggestions to solve the problem of national integration as also for bringing about human unity, since the two needs are complementary. The seminar concluded with a short meditation.

Bangalore The centre held its monthly meeting on 5 September, Sri P. V. Rajagopal presiding. Dr. Lakshminarayana spoke on "How to Keep Young". He said that throughout the ages men have dreamt of finding ways and means of maintaining vigour and youth, and today scientists are actively working toward that end. Until a few years ago scientists believed in the limitations fixed by heredity, but this is not now accepted, because change of nutritional pattern and other factors can extend youth and healthy middle age. He referred to processes which can prolong useful life, and to "aging research" being carried out extensively in the United States and other countries. One can by simple habits, eating less but nutritious food for example, keep physically and mentally fit. He noted that sane life is the surest way to remain young even in the "evening of life".

World Union India Centre conducted its second public seminar on 'National Integration—Means and Methods' on 19 September. Dr. H. S. Lakshminarayana, Sri T. K. Rao, Sri B. S. Sivaraman, Dr. B. N. Lingaraju, Prof. S. Ramakrishnan and Sri Mir Iqbal Hussain participated.

North Calcutta The 29th monthly meeting of the North Calcutta centre was held 24 August, Sri Sushanto Mitra presiding. The programme commenced with devotional songs by Smt. Sati Das and Smt. Ranu Das, followed by group concentration with the Mother's music, and reading from the Upanishads by Sri Sujit Kumar Palit, who inaugurated the meeting. Sri Samar Basu spoke on "The Coming of the Subjective Age". In his speech, Sri T. K. Sinha talked about the "get-together day" held in West Bengal on 22 August, the proposed national convention, the coming fifth triennial conference, and the forthcoming executive committee meeting of North Calcutta centre. At the last study circle, Dr. Makhan Lal Dhar discussed "The Future Society". Smt. Shree Lekha Bose, Smt. Sati Das, Smt. Anita Kumari Ranu Das

and Kumari Kalayani Kar offered devotional songs. The meeting closed with a prayer by Sri Palit and group concentration.

The centre held its 30th monthly meeting presided over by Sushanto Mitra on 20 September. After devotional songs, group concentration with Mother's music, reading of Vedic hymns, and confirmation of the minutes of the last meeting, Sri T. K. Sinha inaugurated the meeting. Kumari Ranu Das, a member of the youth wing, and Sri Kasimath Bhattacharjee spoke on, "The Individual and Group as Thought by Sri Aurobindo" and "World Union, National Integration and Some Growing Thoughts", respectively. Sri Sujit Kumar Palit spoke on, "Youth and the Spiritual Regeneration of India". Sri Samar Basu also addressed the meeting, and Sri Palit and Sri Sinha read out self-written verses.

It was decided that the next study circle meeting will be conducted by Dr. Makhan Lal Dhar on 11 October on the subject, "Jib-O-Brahman", and that a course on "Preliminary Ideas on Sri Aurobindo and the Mother" would be continued in the Sunday weekly circle of students and youth.

Regional Centre (State) West Bengal World Union Day was observed on 22 August with a whole-day programme and exhibition, of the cultural workshop, at Sodepur High School. More than 200 delegates from all World Union centres of West Bengal participated. It commenced with the hoisting of a flag marked with Mother's symbol by Purnendu Prasad Bhattacharya, followed by the slogan and song "Bandemataram" and other songs. Sri Samir Ghatak, secretary of Sodepur centre, delivered a welcome address. Sri S. N. Ray Choudhury, chairman of the Regional Centre presided over the morning session. Thirteen students from different World Union centres participated in the seminar on "National Integration for World Unity", which was conducted by Sri Shiba Prasad Nag. The cultural workshop with the creative work of members, students and children was opened by the chairman, and paintings, models, craft works and cottage industry products, etc., were displayed there. The morning session ended with devotional songs by Sri Mihir Dey.

The evening session was presided over by Sri Purnendu Prasad Bhattacharya. Sri Samar Basu spoke on, "The Second National Convention —A Programme", requesting all to make it a success. Sri Bhattacharya spoke about the soul of the fifth conference of World Union International. Thereafter a literary conference conducted by him commenced. Sri T. K. Shah delivered an introductory speech on "Future Literature", and read some passages from the writings of Sri Aurobindo, the Mother, and Sri Anirban, as well as his own poetry, essays and stories. At the conclusion of the conference, Sri Basu Deb Samanto discussed the progress of literature. In the cultural programme, members of the World Union Konnagar Centre offered a dance-drama, "KE-NO-AI-MA", written by Sri Samar Basu. Members of the World Union Sodepur Centre enacted dances of different states of India. At the close of the programme, Sri T. K. Sinha thanked all concerned.

Cultural and Economic Council The council has been registered under the Societies Registration Act with the following as members of the first governing body:

- | | |
|----------------------|---------------------------------------------|
| 1. President | Sri A. B. Patel, Pondicherry |
| 2. Chairman | Sri Purnendu Prasad Bhattacharya, Baranagar |
| 3. General Secretary | Sri Chuni Lal Goswami, Baranagar |

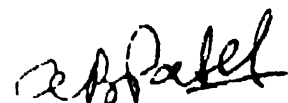
4. Registrar	Dr. Biswanath Baral (Chandernagore Centre)
5. Treasurer	Sri L. N. Datta (Calcutta Centre)
6. Asst. Secretary	Sri M. M. Chandra (Calcutta Centre)
7. „	Sri Samiran Ghosh (Calcutta Centre)
8. Members	Dr. Nil Ratan Karmakar (Alambazar Centre)
9. „	Sri Samir Kumar Ghatak (Sodepur Centre)
10. „	Sri Keshab Ch. Ghatak, Baranagar
11. „	Sri Dharendra Ch. Sarkar, Baranagar

The constitution of the council provides for the formation of a consultative council. The first consultative council consists of eleven well-known persons. The objects of the council are praiseworthy and it deserves support. We shall give some of the important objects of the council in an issue of "Focus" in the near future.

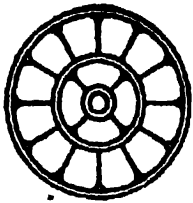
Uttarpara The centre held its 38th monthly seminar on 9 October, when Sri S. K. Gupta, Sri N. K. Roy, and Kumari Shampa Bhattacharya spoke on "Youth and the Spiritual Regeneration of India". The first phase of the discussion was to determine the necessity of spiritual regeneration and the ways for achieving it, and the second phase was to ascertain what role the youth has to play: matter and spirit are the two aspects of divinity—the younger generation is to realise this truth. At the commencement of the seminar, Sri Madhusudan Banerjee paid homage to Mahatma Gandhi on the occasion of his 108th birth anniversary. Sri Shymal Chatterji and Pradeep Panja, members of the youth wing, and Sri Ashim Chakraborty, student member of Konnagar centre, paid homage to the renowned Bengali novelist, Sarat Chandra Chatterji, on the occasion of his birth centenary, and Sri Samar Basu spoke of the late Sri Surendra Mohan Ghose, former chairman of World Union.

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General Secretary
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14. 8. 68

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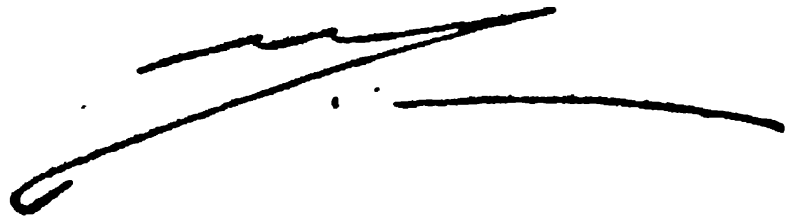
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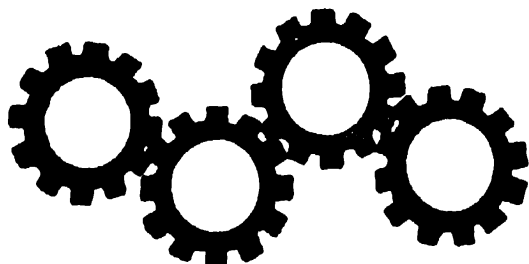
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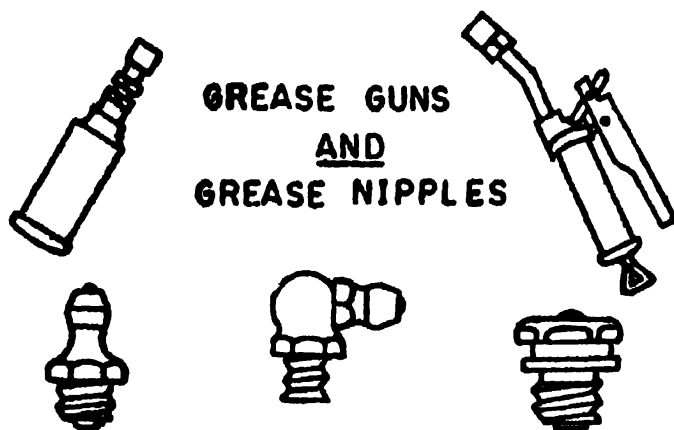
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